

C 426

**STEREO
AM/FM TUNER**

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AM/FM TUNER**

SERVICE MANUAL



SERVICE SAFETY PRECAUTIONS

1. Safety check out

(Only U.S.A. model)

Before returning the product to the customer, make leakage current or resistance measurements to determine that exposed parts are acceptably insulated from the supply circuit.

Parts marked with the symbol \triangle are critical with regard to the risk of fire and electric shock. Replace only with parts recommended by the manufacturer.

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SPECIFICATIONS

AM BAND SPECIFICATION

Frequency Range CA 530 - 1710 KHz Step 10 KHz
EU 531 - 1602 KHz Step 9 KHz

		<u>FREQ (KHz)</u>	<u>UNIT</u>	<u>LIMIT</u>
1.	Usable sensitivity (400Hz, -20dB, direct input)	999 /1000	dBuV	<= 30
2.	S/N RATIO (5mV input)	999 /1000	dB	>= 38
3.	THD (5mV input)	999 /1000	%	<= 3
4.	IF Rejection (450KHz) (ref. to item 8)	603 /600	dB	>= 36
5.	Image Rejection (F+2xIF) (ref. to item 8)	1404 /1400	dB	>= 25
6.	Selectivity (ref. to item 8)	999 /1000	dB	>= 17
7.	Output (30%, 10mV)	999 /1000	mV	100 ~ 180
8.	Loop sensitivity 20dB S/N	999/1000 603 / 600 1404 / 1400	dB dB dB	<= 68 <= 68 <= 68
9.	Frequency response 100 - 2.3KHz (400 Hz, 5mV)	999 /1000	dB	0 +/- 6dB

FM BAND SPECIFICATION

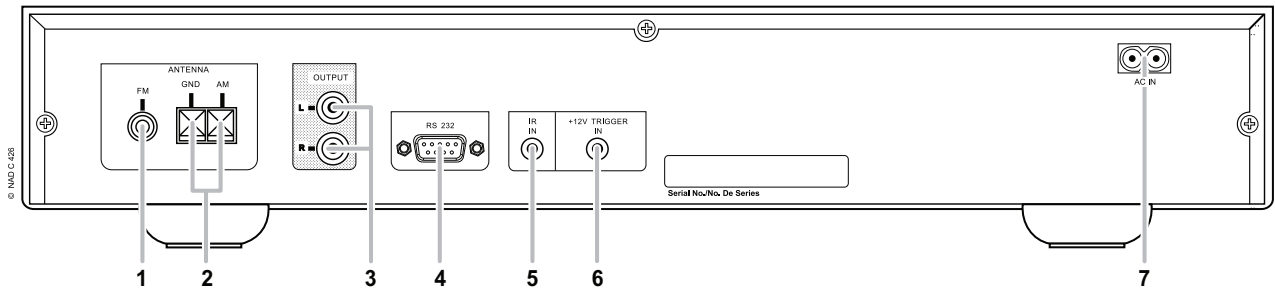
Frequency Range CA/EU 87.5 - 108MHz Step 50 KHz

			<u>FREQ</u>	<u>UNIT</u>	<u>LIMIT</u>
1.	Usable sensitivity MONO IHF (3% THD)		98MHz	dBu	<= 15
2.	S/N RATIO (60dBu A filter)	MONO	98MHz	dB	>= 72
	(60dBu A filter)	STEREO	98MHz	dB	>= 68
3.	THD (60dBu Audio LPF)	MONO	98MHz	%	< 0.4
	(60dBu Audio LPF)	STEREO	98MHz	%	< 0.6
	L = R, C=40KHz Dev.				
4.	IF Rejection (10.7MHz) (refer to item 1)	CA&EU	98MHz	dB	> 80
5.	Image Rejection (119.4 MHz) (refer to item 1)	CA&EU	98MHz	dB	>= 70

6.	Capture ratio (40dBu)			dB	< 3
7.	AM Supression @ 60dBu 100% mod FM, 30% mod AM		98MHz	dB	> 60
8.	Pilot suppression	L & R	98 MHz	dB	> 60
9.	Frequency response (1KHz Ref) UL 75Us,CE50Us		20Hz & 10KHz	dB	0 +/- 1.5
10.	Channel Separation @ (60dBu IHF wtd)		30 Hz 1 KHz 10KHz	dB dB dB	>= 28 >= 38 >= 28
11.	Alternate channel selectivity +/-400KHz, IHF		UL CE	dB dB	>= 35 > 60
12.	Muting level			dBu	18 +/-6.
13.	Output	CA EU	98MHz	mV	350~600 550~900
14.	RDS decode sensitivity.			dBu	<= 30
15.	Auto-search sensitivity	ON OFF		dBu dBu	<= 30 >= 15
16.	Blend ON separation@1KHz		98MHz	dB	6 +/-2

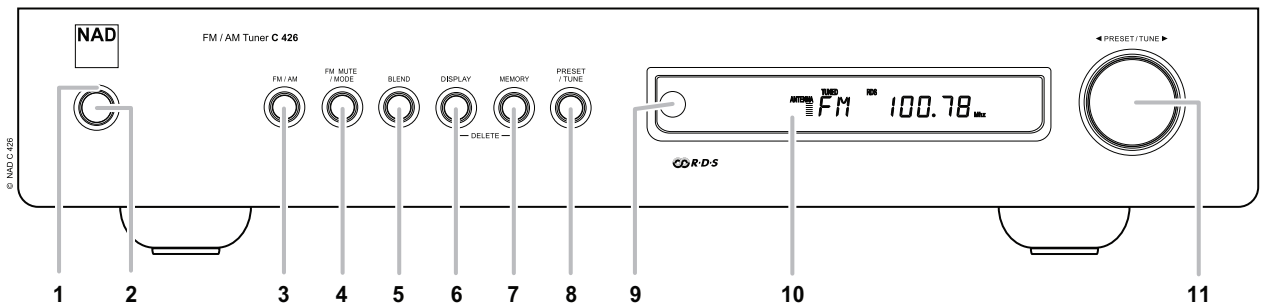
REAR PANEL / FRONT PANEL

REAR PANEL



- | | |
|------------------------|--------------------|
| 1. FM ANTENNA TERMINAL | 5. IR IN |
| 2. AM ANTENNA TERMINAL | 6. +12V TRIGGER IN |
| 3. OUTPUT (L, R) | 7. AC MAINS INPUT |
| 4. RS-232 | |

FRONT PANEL



- | | |
|-------------------|-------------------------------|
| 1. STANDBY LED | 7. MEMORY |
| 2. STANDBY BUTTON | 8. PRESET/TUNE |
| 3. FM/AM | 9. REMOTE SENSOR |
| 4. FM MUTE/MODE | 10. VFD |
| 5. BLEND | 11. PRESET/TUNE CONTROL KNOB: |
| 6. DISPLAY | |

IMPORTANT NOTES

- Show the software version**
Press "DISPLAY" and "FM/AM".
- Light UP all the icon on the VFD**
Press "FM/AM" & "PRESET/TUNE".
- Factory test resets**
When VFD all Light press any key.
- AM Step 10K/9K Change**
When AM band, press "FM MUTE/MODE" & "PRESET/TUNE".
- Shipment resets (clear)**
When pressing "MEMORY" & "PRESET/TUNE" to VFD all Light, press any key.

DISASSEMBLY INSTRUCTIONS

1. Remove machine screws M 4.0 x 6.0 (① to ④) from the side panels.
Remove tapping screw 3.0 x 8.5 (⑤) from the back panel.
Refer to **Figure No.1**.

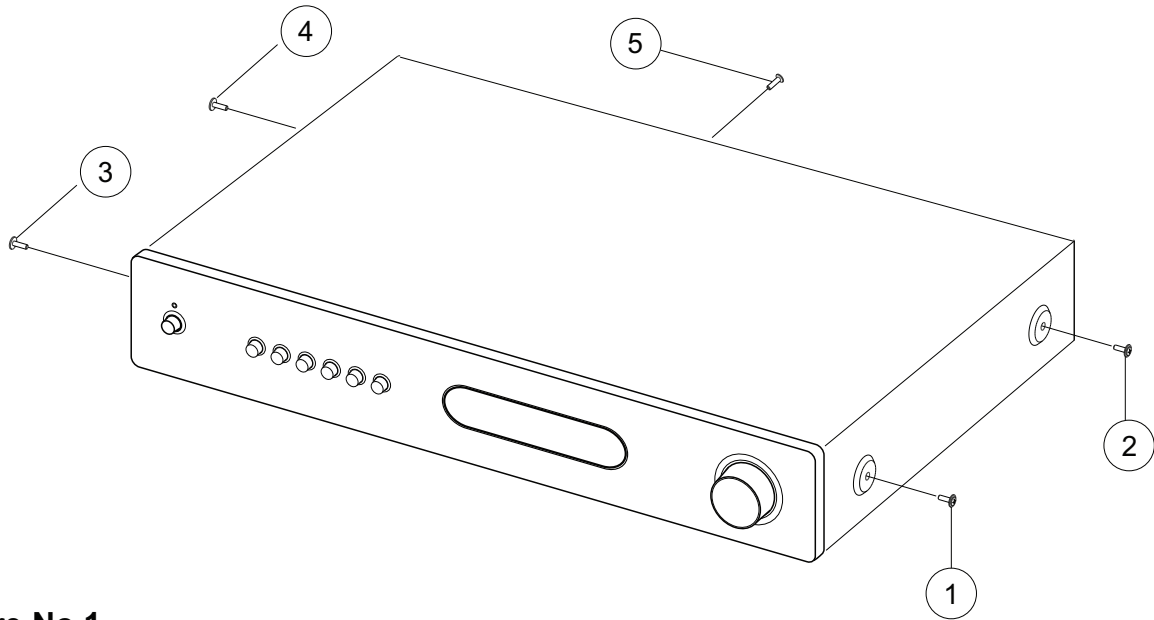


Figure **No.1**

2. Pull both sides of the TOP COVER slightly outwards (⑥) and tilt approx. 35° and then remove in the direction as indicated by the arrow (⑦). Refer to **Figure No.2**.

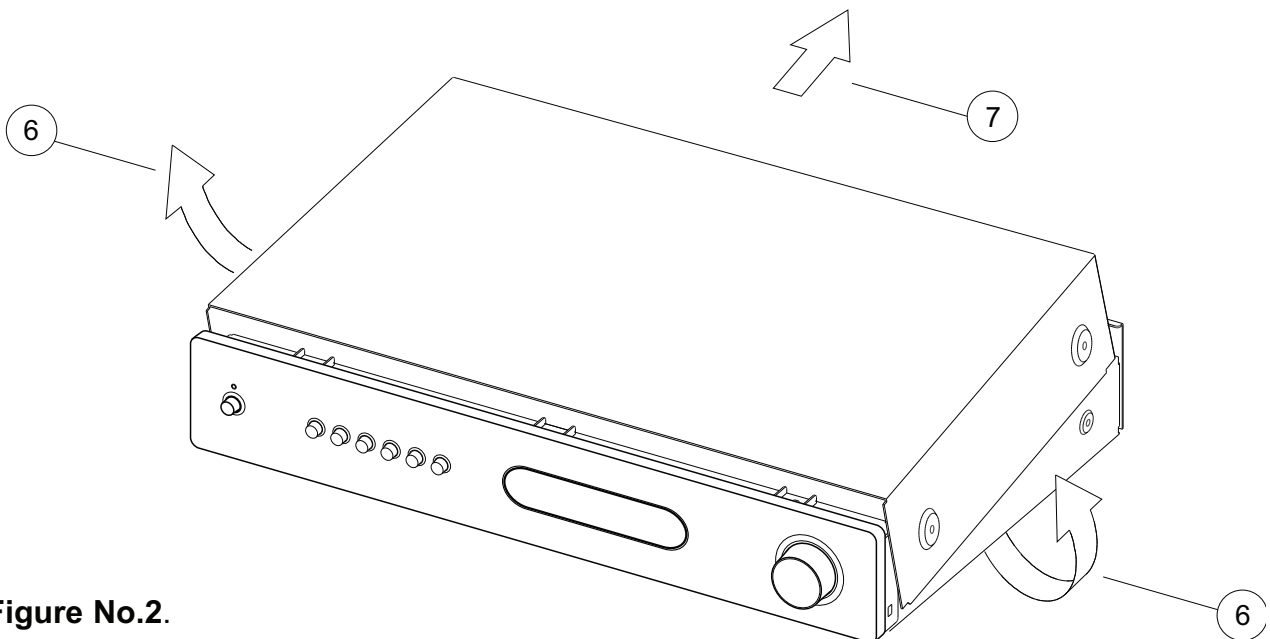
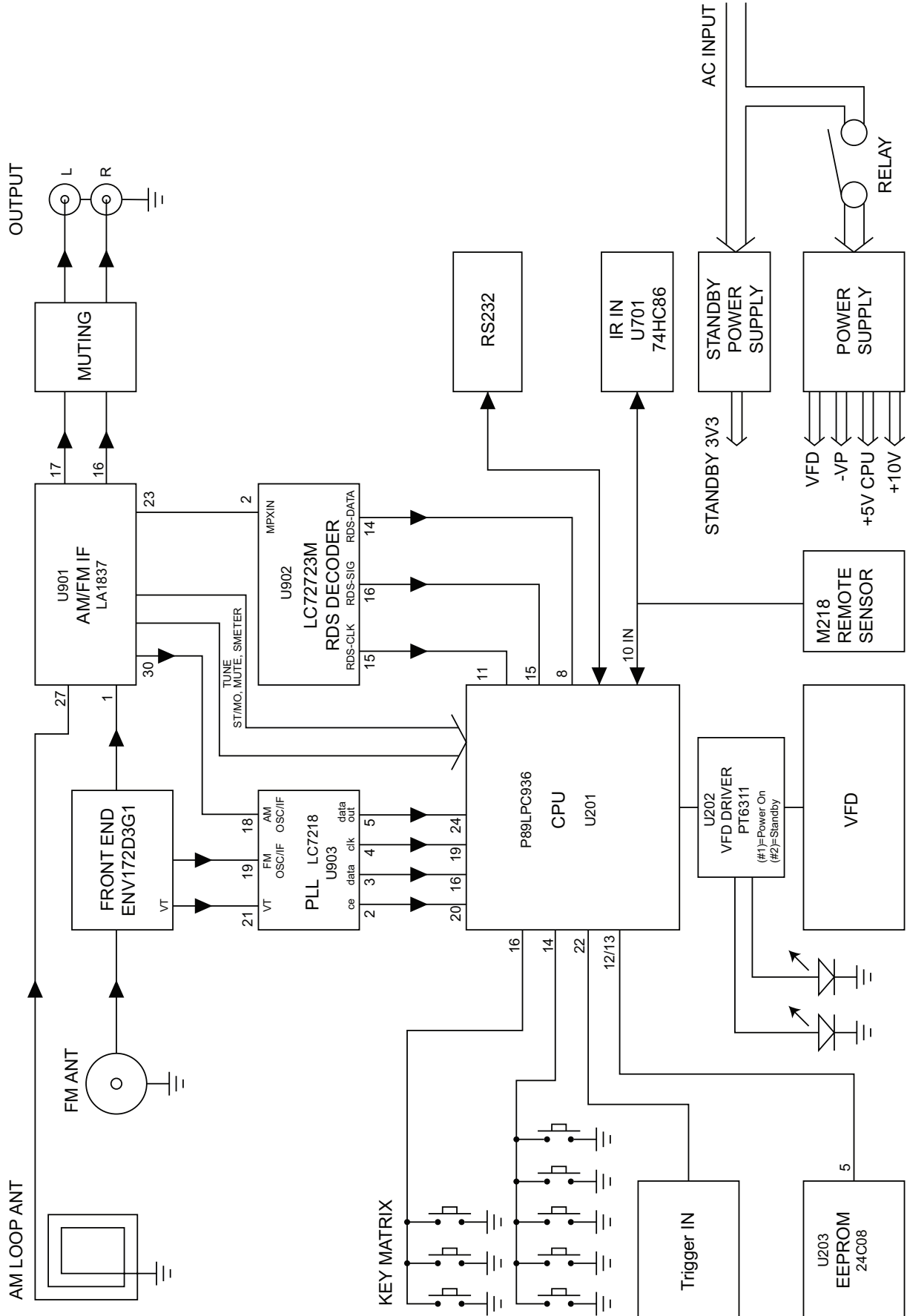
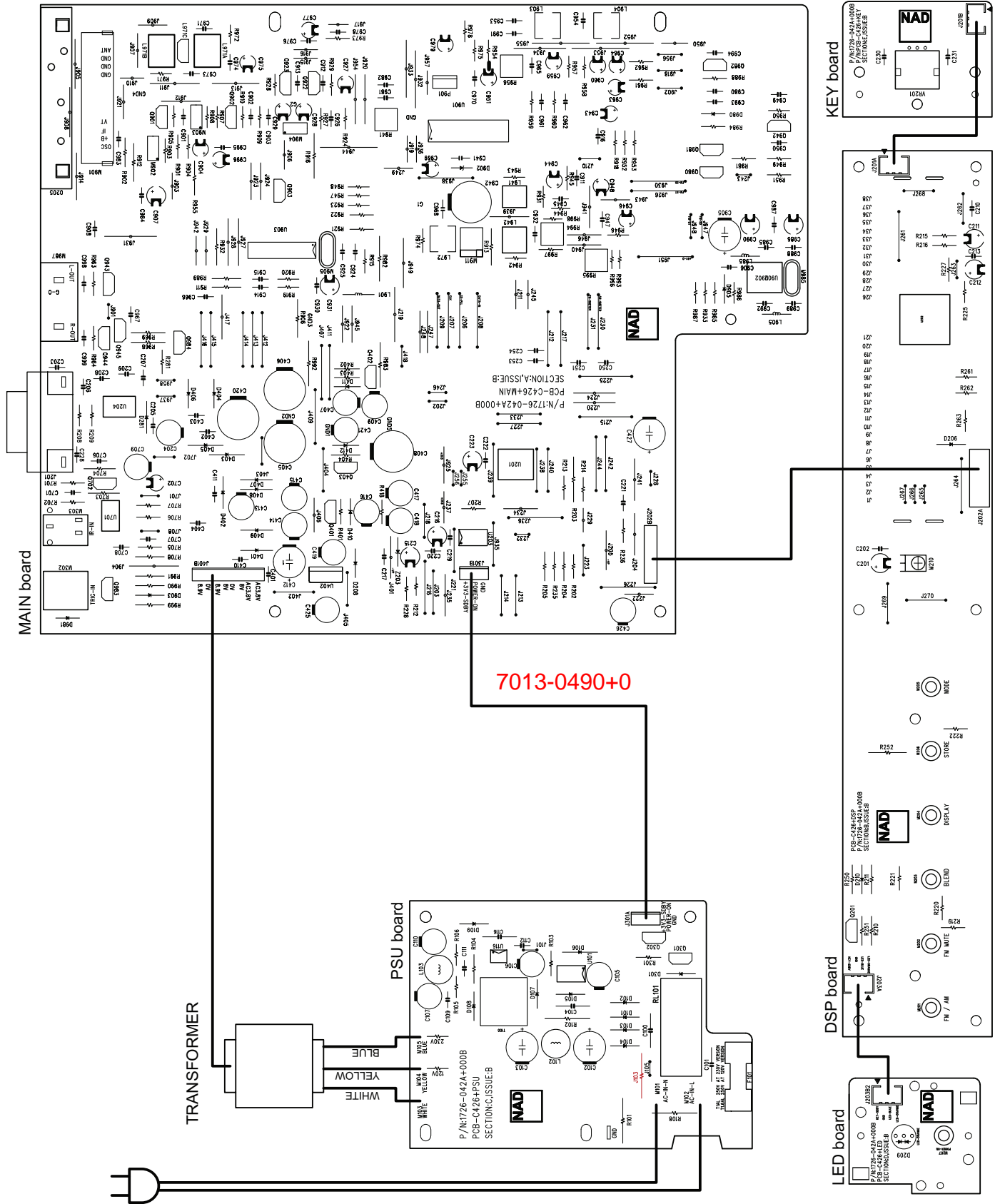


Figure **No.2**.

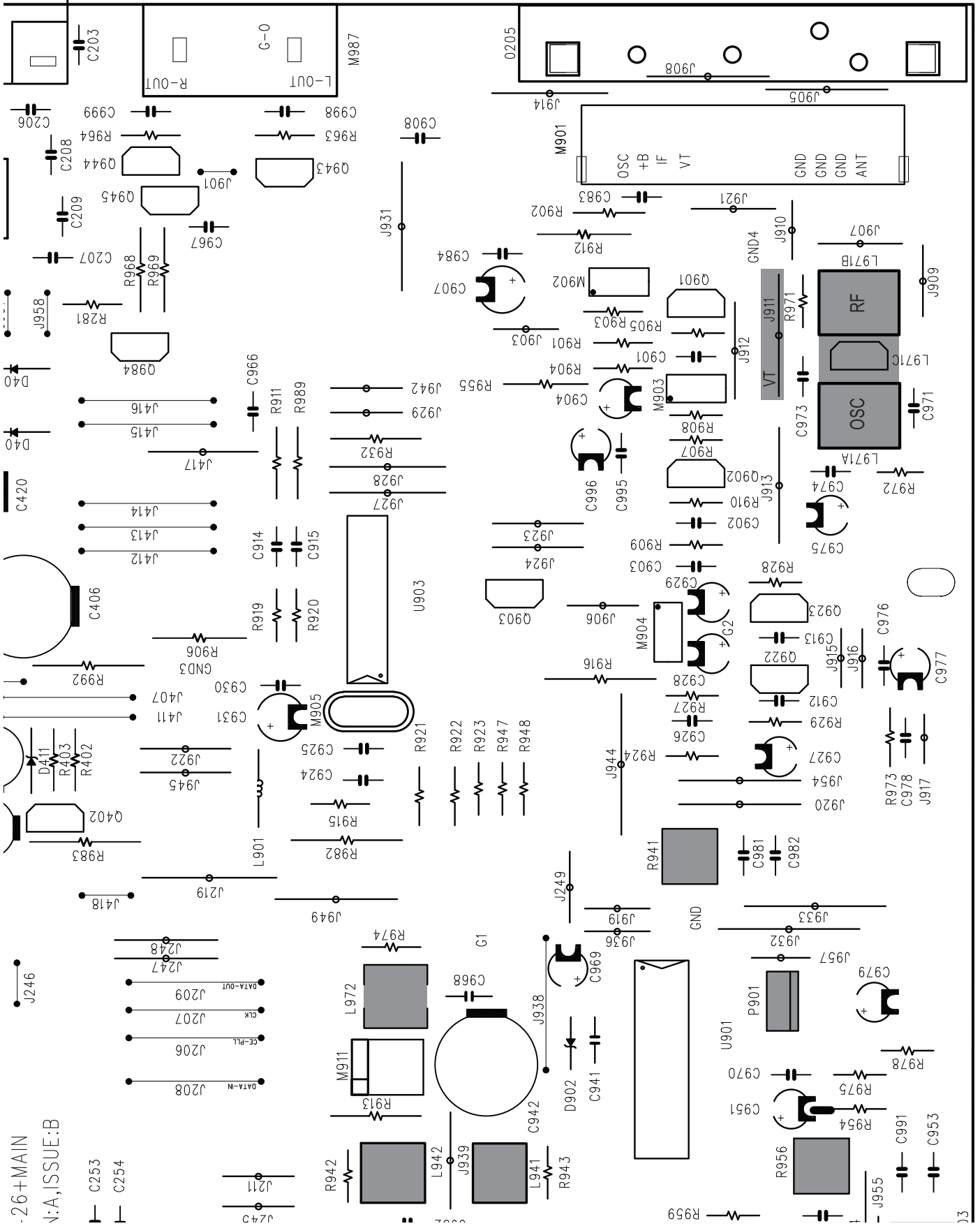
BLOCK DIAGRAM



WIRING DIAGRAM



ADJUSTMENT POINTS DIAGRAM



INSTRUMENT SETUP

1. FM MEASUREMENT

Fig. 1

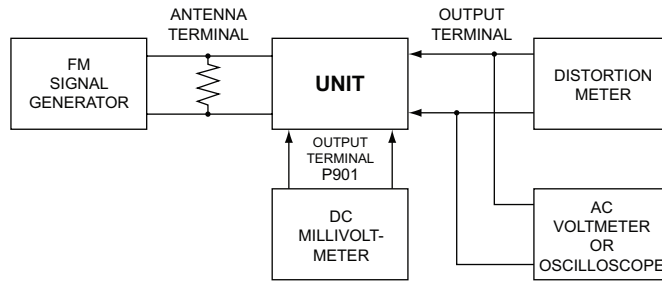
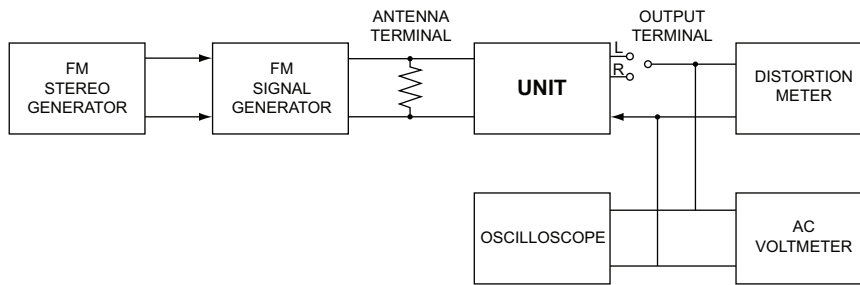
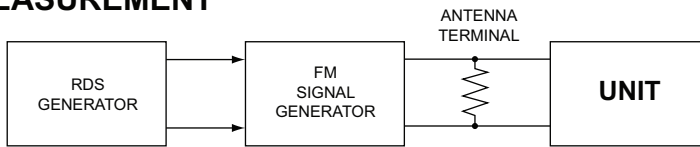


Fig. 2



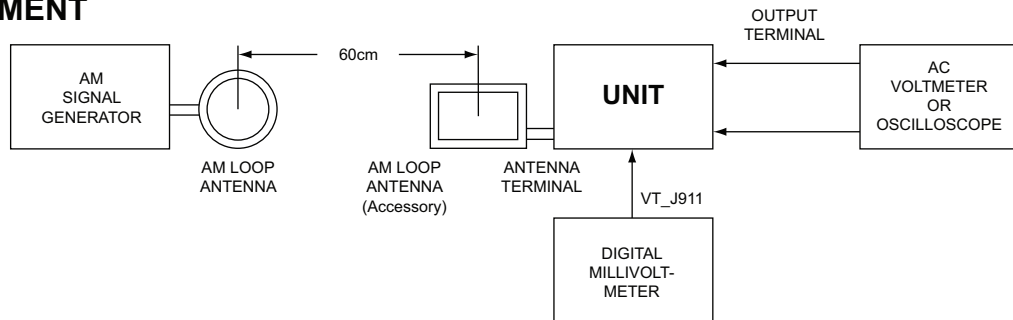
2. RDS MEASUREMENT

Fig. 3



3. AM MEASUREMENT

Fig. 4



ALIGNMENT PROCEDURES

FM/RDS SECTION

- FM mono: 1kHz, 75kHz devi., 60dB/μV
- FM stereo: 1kHz, 67.5kHz devi., 60dB/μV
Pilot signal 19kHz 7.5kHz devi.

OUTPUTS

- Connect the 47Kohm resistor unless otherwise noted.

Item	Step	Connection of instrument	FM SG output	Stereo modulator output	Tuning frequency	Output indicator	Adjustment point	Adjust for	Remarks
FM IF/RF	1	Fig.1	99.0MHz 1kHz 75kHz devi. 65dBf (60dB)	-	99.0MHz	DC voltmeter	L941	0±70mV	FM MUTE/MODE switch: ON/AUTO Repeat the steps 1 to 3 until no further adjustment is necessary.
	AC voltmeter					IFT on the front end	Maximum		
	Distortion analyzer					L942	Minimum		
Stereo Distortion		Fig.2	99.0MHz Ext. mod. 65dBf (60dB)	Channel L or R 1kHz	99.0MHz	Distortion analyzer	IFT on the front end	Minimum	FM MUTE/MODE switch: ON/AUTO Don't turn more than ±180°
Stereo Separation		Fig.2	99.0MHz Ext. mod. 65dBf (60dB)	Channel L or R 1kHz	99.0MHz	Oscilloscope	R941	Maximum separation	Repeat stereo distortion and stereo separation alignment until THD at minimum and separation at maximum.
						Distortion Meter		Minimum	
Mute Level		Fig.1	99.0MHz 18dB	-	99.0MHz	Oscilloscope	R956	Signal output	
RDS		Fig.3	99.0MHz Ext. mod. 65dBf (60dB) RDS 2% MOD	-	99.0MHz	-	-	-	Decode the RDS-Program station

AM SECTION

AF Modulation: 400Hz, 30%

For AH Version

Step	AM SG output	Tuning frequency	Output indicator	Adjustment point	Adjust for
1	-	530kHz	Digital DC voltmeter	OSC coil on RF block M971	1.35±0.2V
2	600kHz 400Hz 30% mod. 60dB/m	600kHz	AC voltmeter	RF coil on RF block M971	Maximum
3	600kHz 400Hz 30% mod. 60dB/m	990kHz	AC voltmeter	L972	Maximum

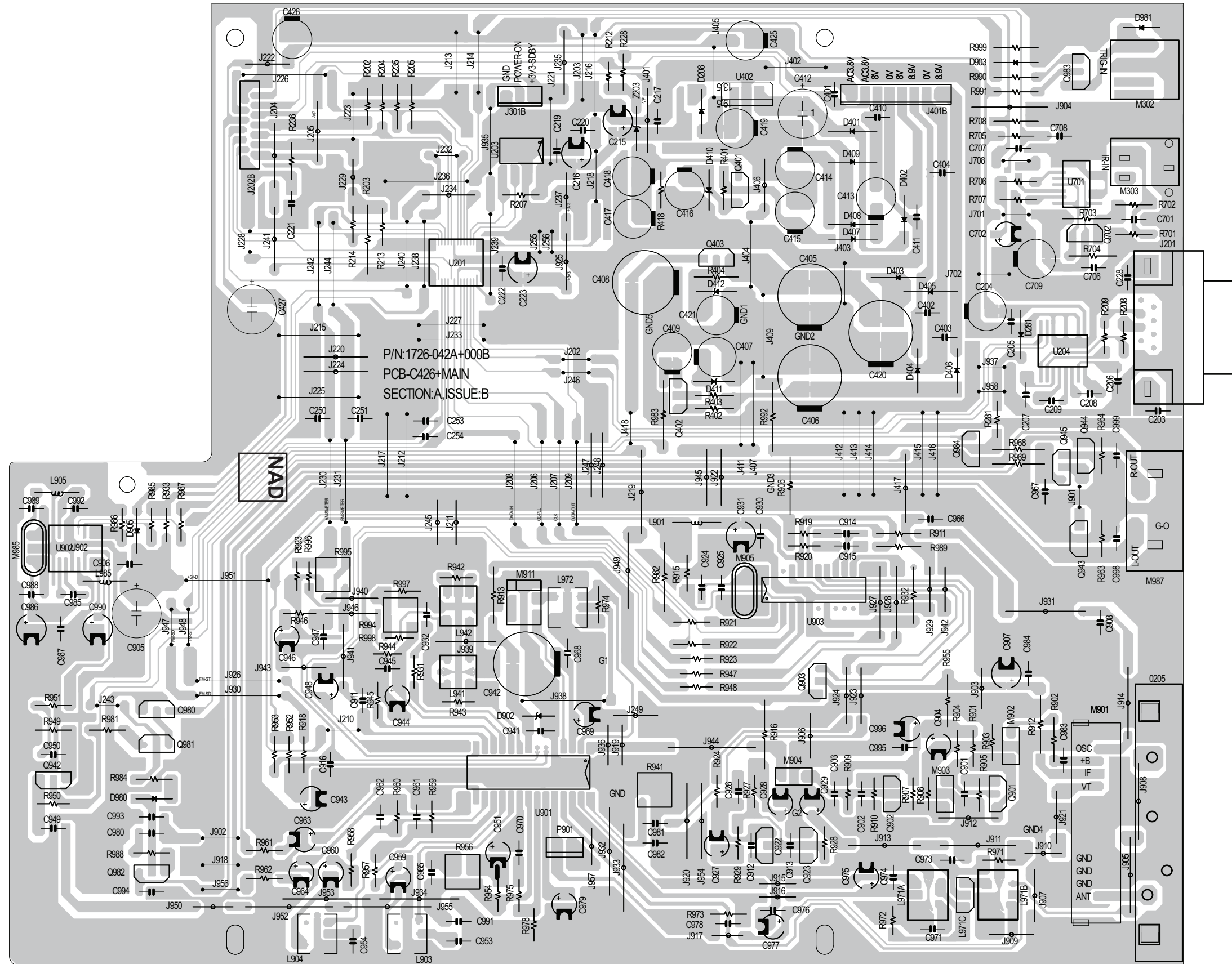
For C Version

Step	AM SG output	Tuning frequency	Output indicator	Adjustment point	Adjust for
1	-	522kHz or 531kHz	Digital DC voltmeter	OSC coil on RF block M971	1.3±0.2V (522kHz) 1.35±0.2V (531kHz)
2	600kHz 400Hz 30% mod. 60dB/m	603kHz	AC voltmeter	RF coil on RF block M971	Maximum
3	600kHz 400Hz 30% mod. 60dB/m	999kHz	AC voltmeter	L972	Maximum

PCB LAYOUT

MAIN BOARD

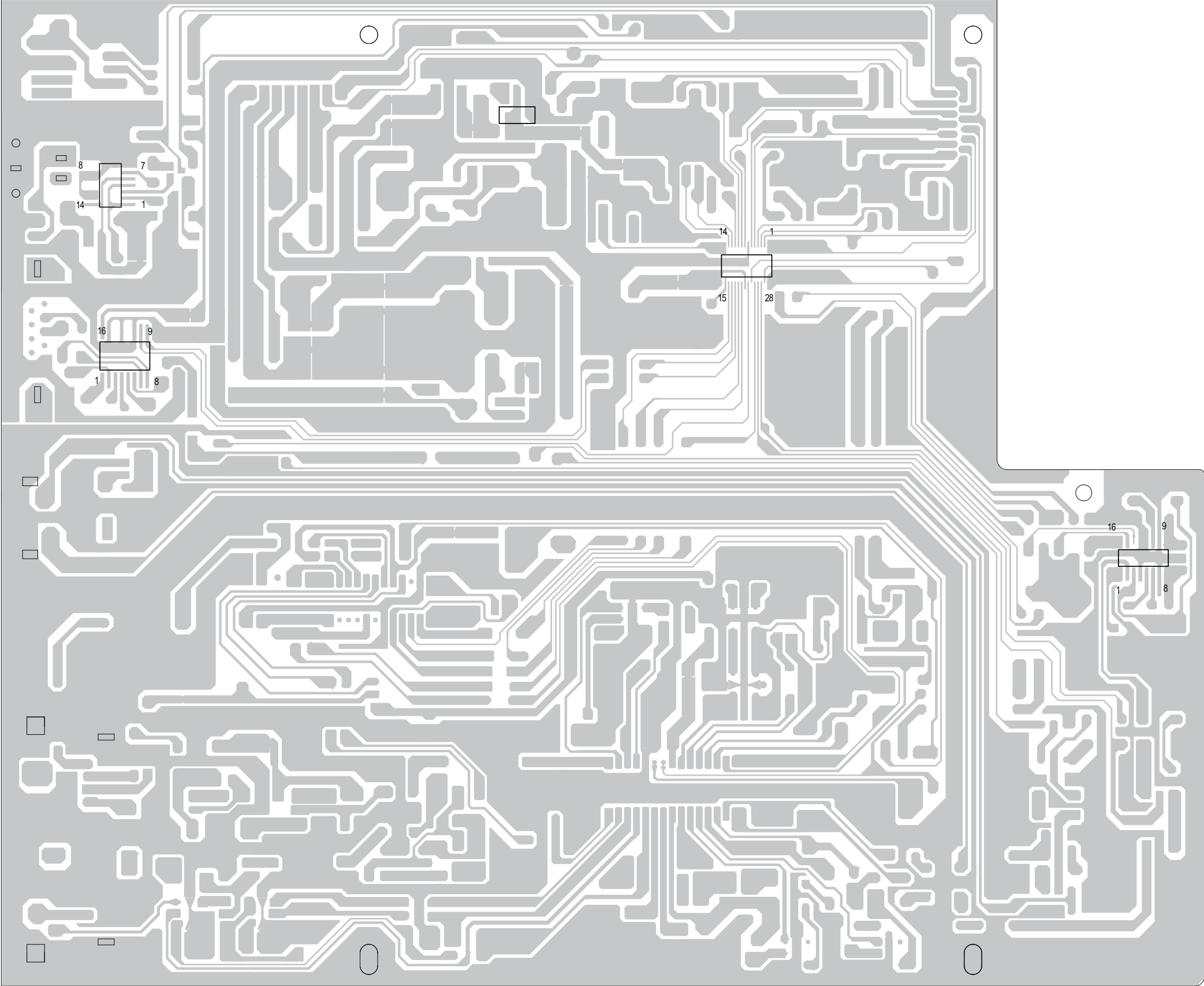
Top side



P/N: 1726-042A+000B
PCB-C426+MAIN
SECTION:A,ISSUE:B

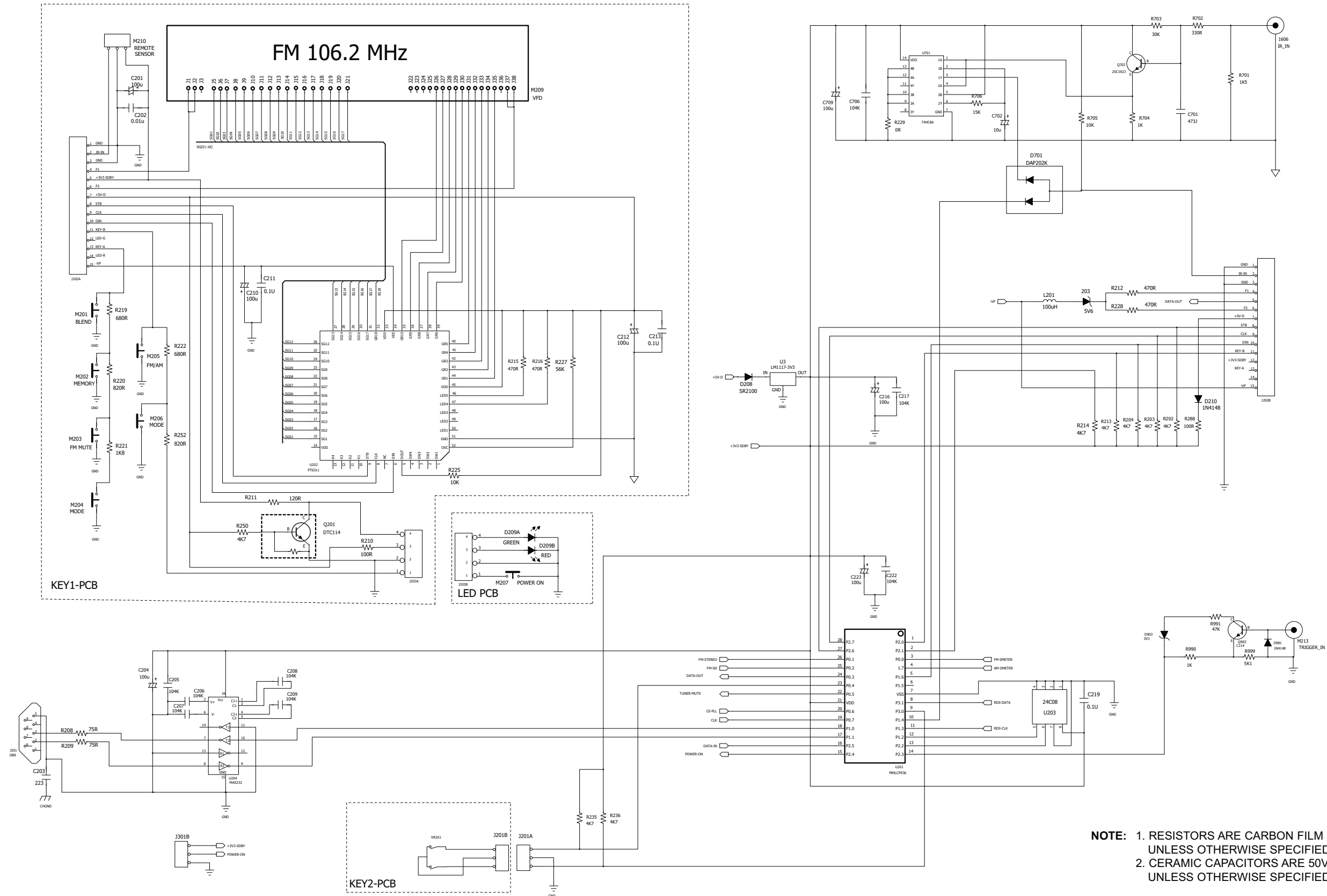
MAIN BOARD

Bottom side



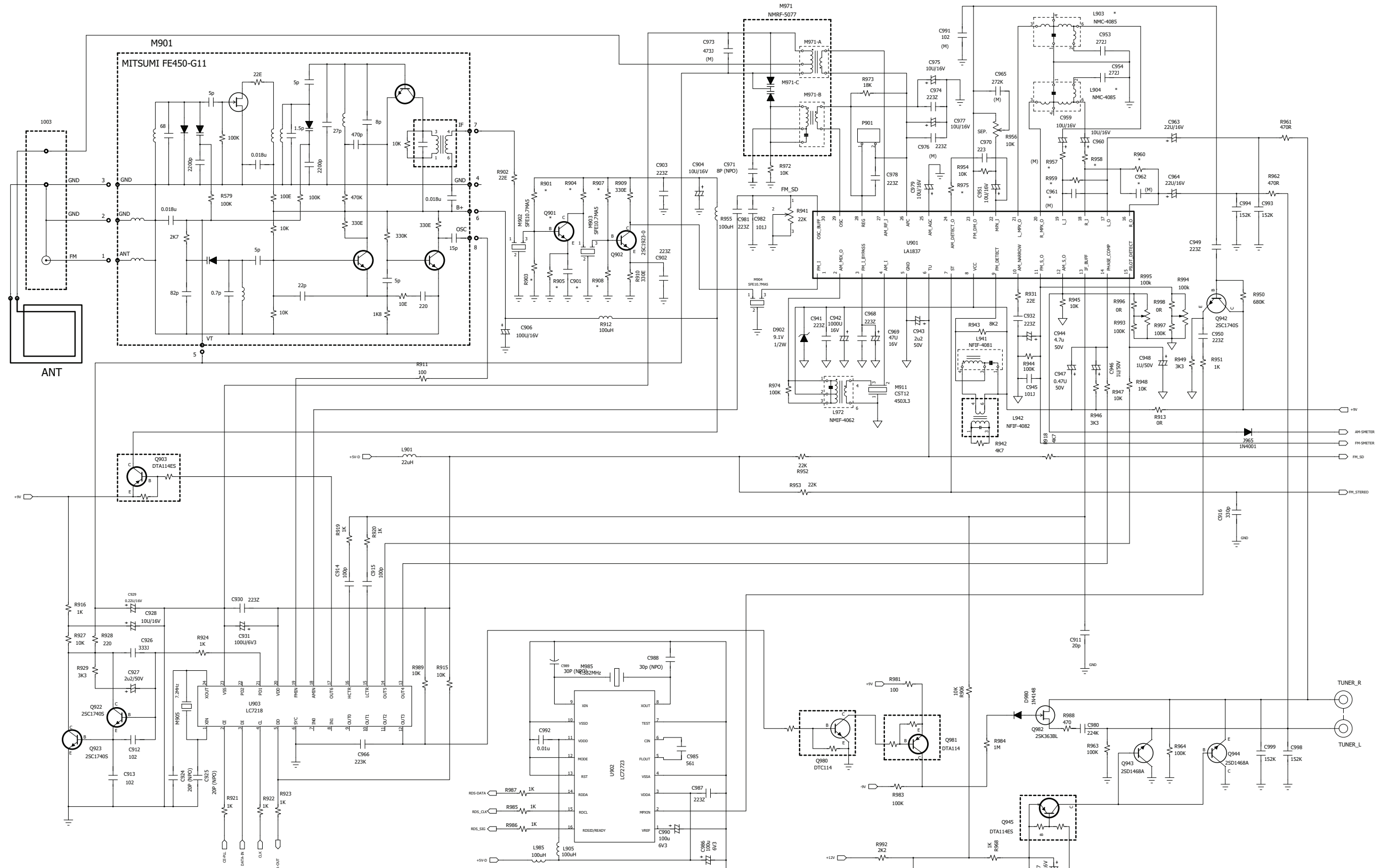
SCHEMATIC DIAGRAM

KEY / MCU / DISPLAY



NOTE: 1. RESISTORS ARE CARBON FILM 5% 1/8W UNLESS OTHERWISE SPECIFIED.
2. CERAMIC CAPACITORS ARE 50V 10% UNLESS OTHERWISE SPECIFIED.

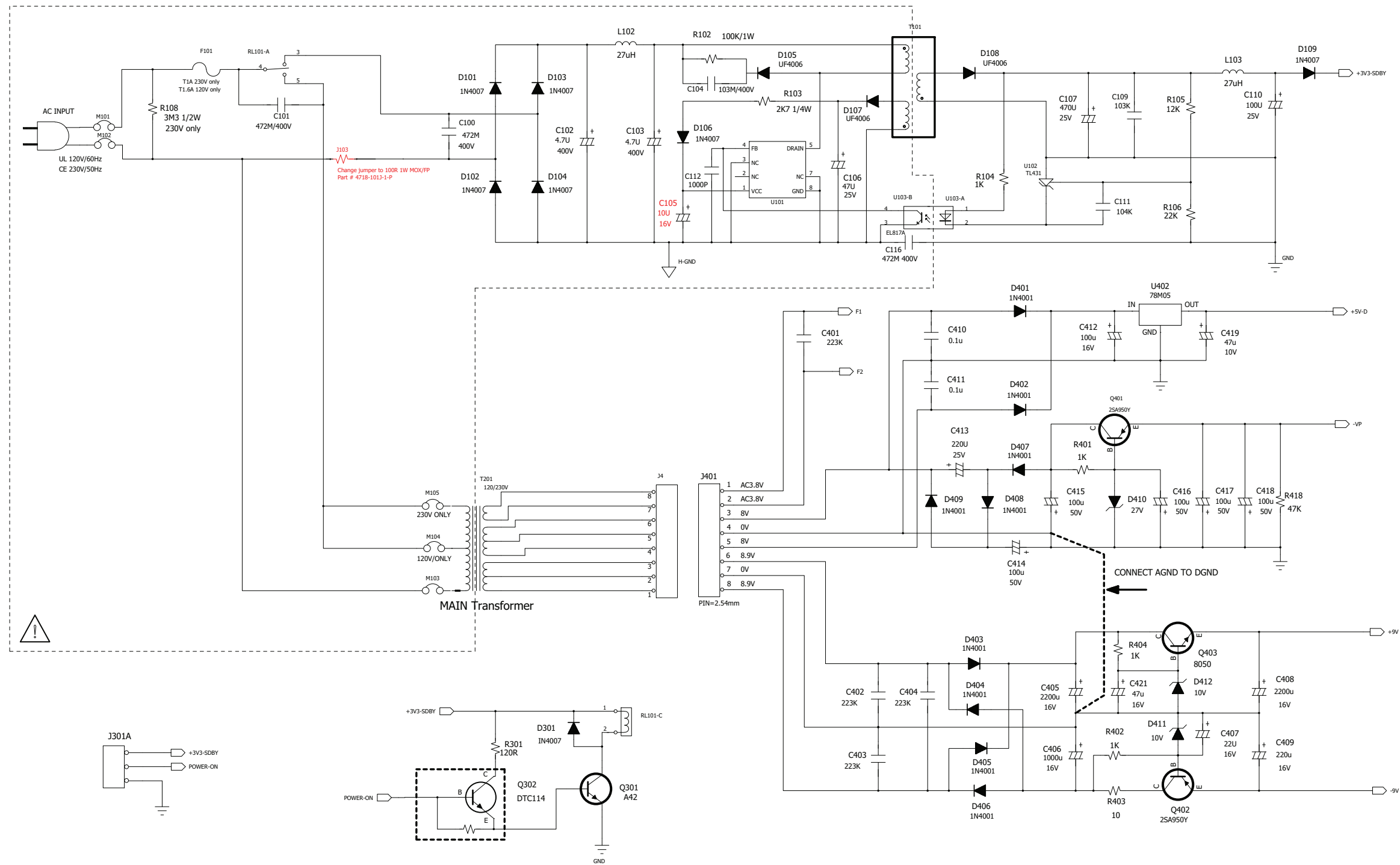
TUNER



	R901	R904	R907	R903	R905	R908	R975	R959	R960	C901	C961	C962	Q901	R957	R958
AH	3K3	-	-	1K	-	-	33K	120K	120K	-	332	332	-	4K3	4K3
C	33K	330	3K3	12K	680	470	56K	270K	270K	223	152	152	25C945A-P	3K	3K

NOTE: 1. RESISTORS ARE CARBON FILM 5% 1/8W UNLESS OTHERWISE SPECIFIED.
 2. CERAMIC CAPACITORS ARE 50V 10% UNLESS OTHERWISE SPECIFIED.

PSU

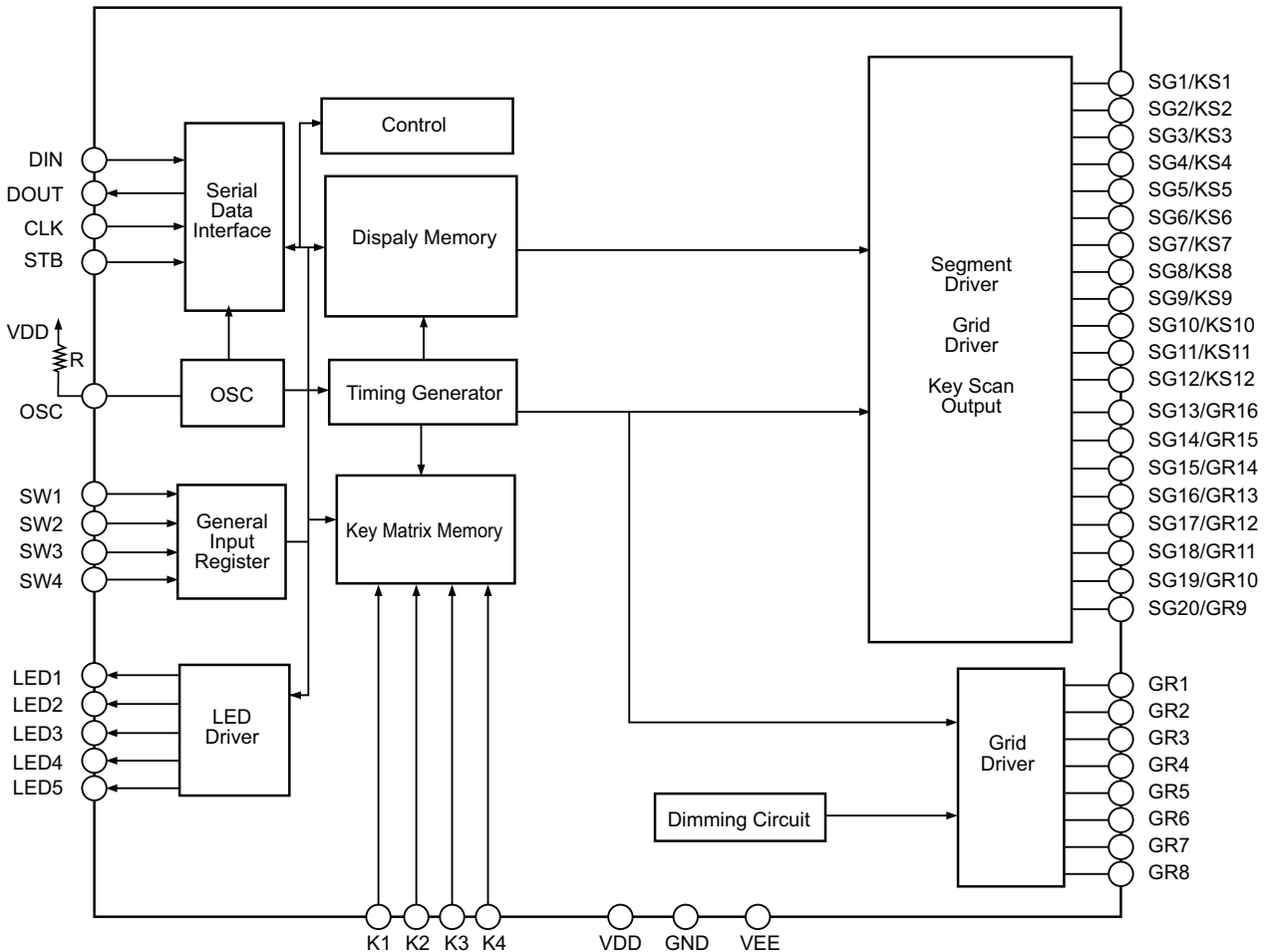
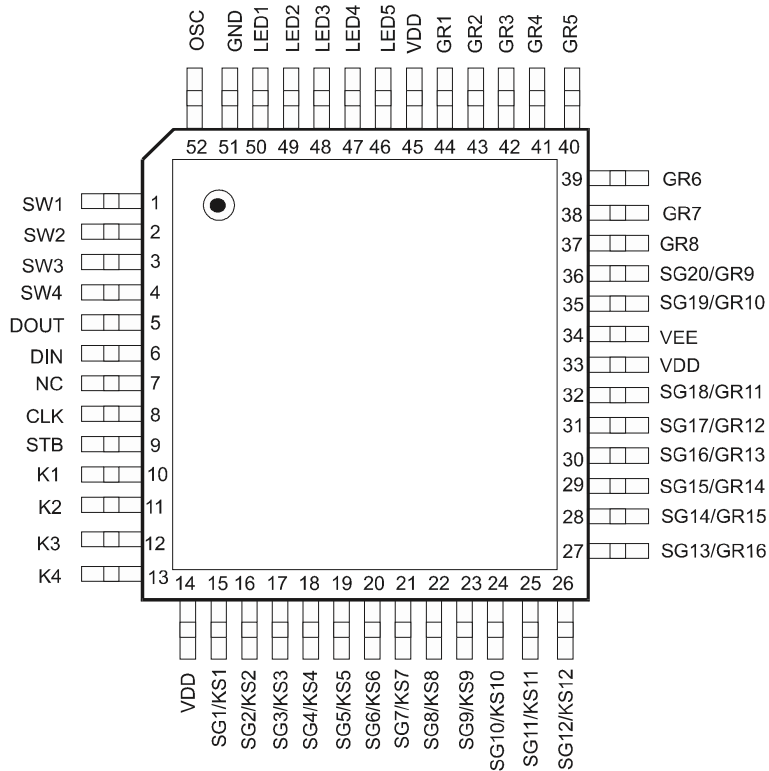


NOTE:1 RESISTORS, ARE METAL FILM 5% UNLESS OTHERWISE SPECIFIED.
 2 CERAMIC CAPACITORS, ARE 50V 10% 0805. UNLESS OTHERWISE SPECIFIED.
 3 COMPONENTS MARKED "!" ARE SAFETY CRITICAL PARTS.

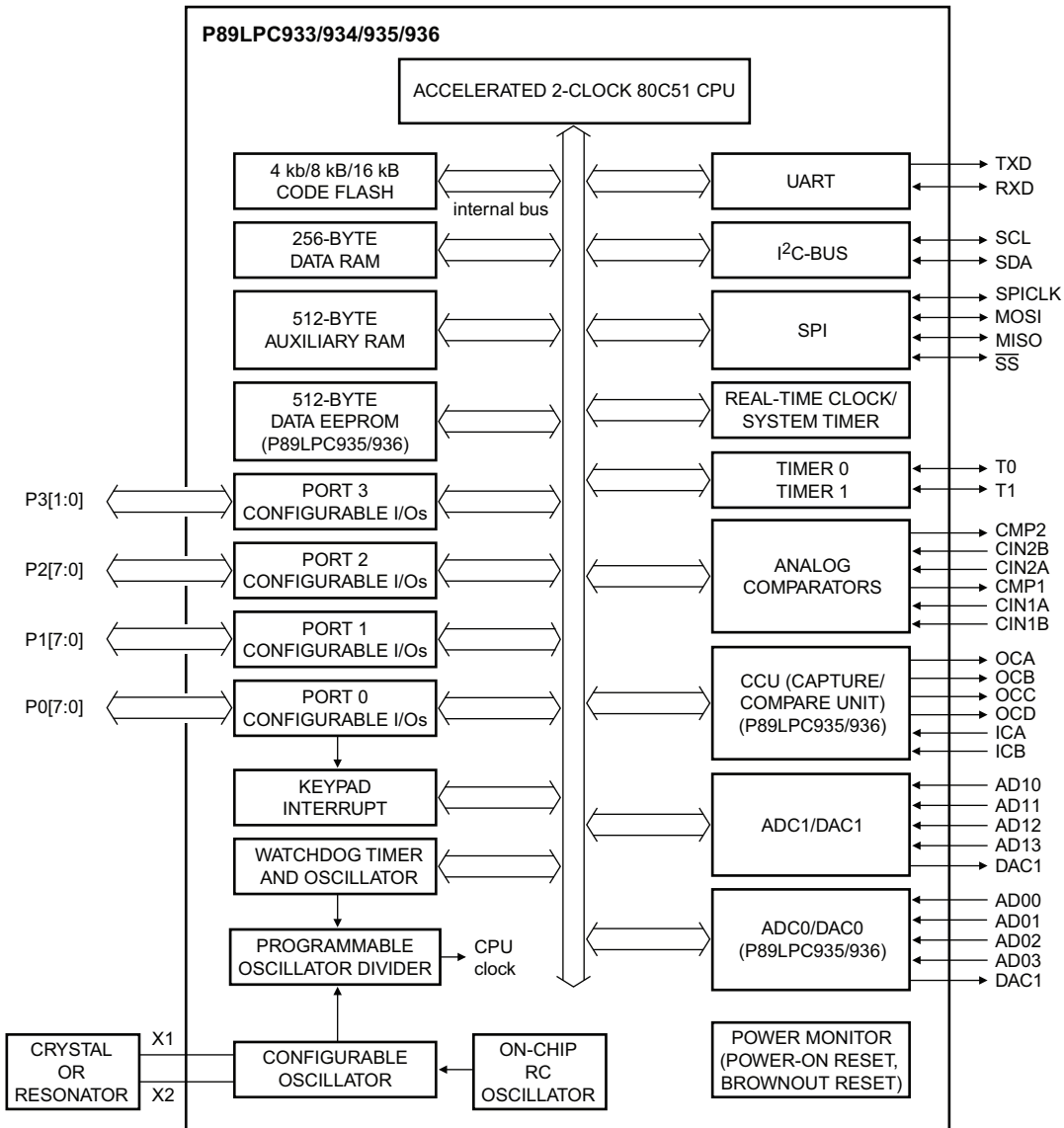
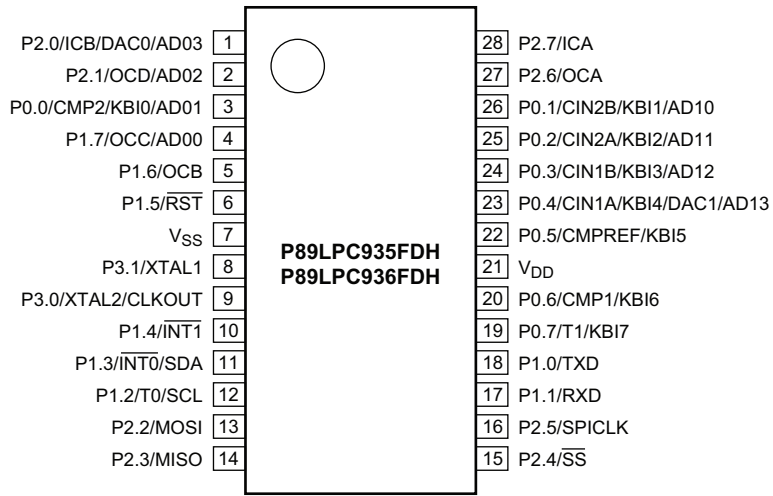
IC BLOCK DIAGRAM

DSP Board

U202: PT6311

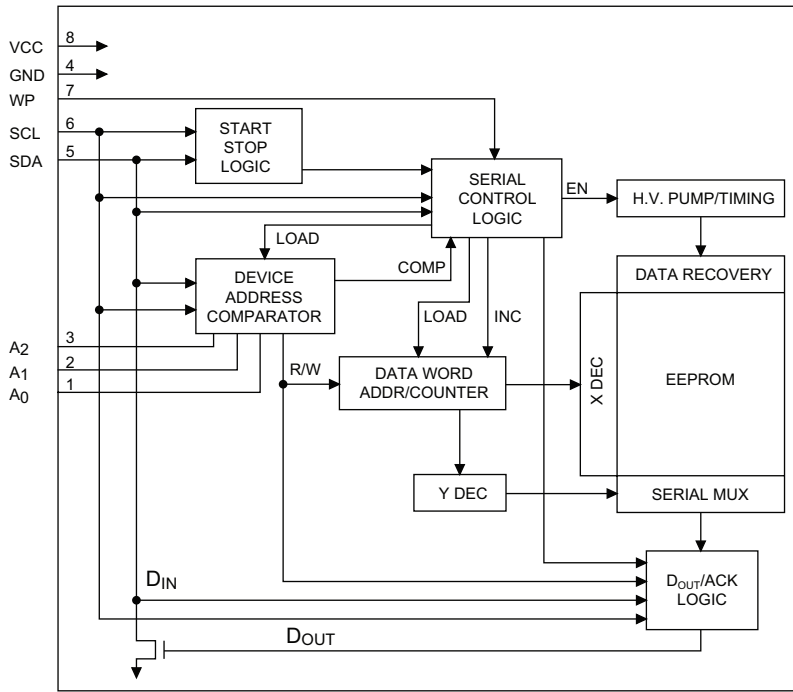


Main Board
U201: P89LCP936



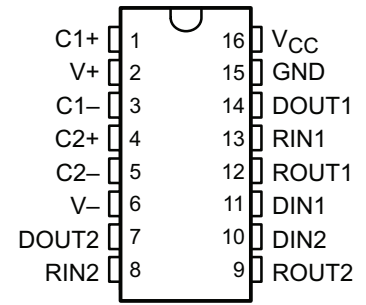
Main Board

U203: AT24C08A-10PU



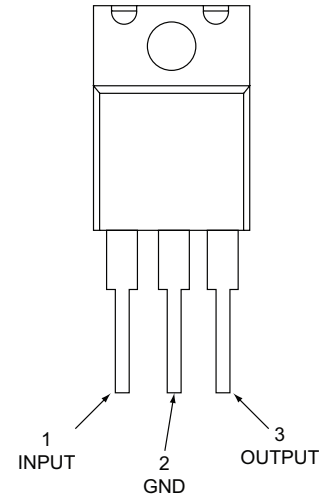
Main Board

U204: MAX232D



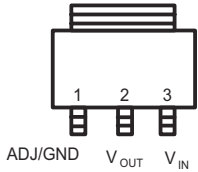
Main Board

U402: NJM78M56FA



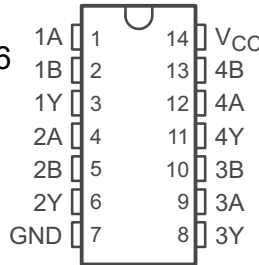
Main Board

U206: NCP1117ST33T3G



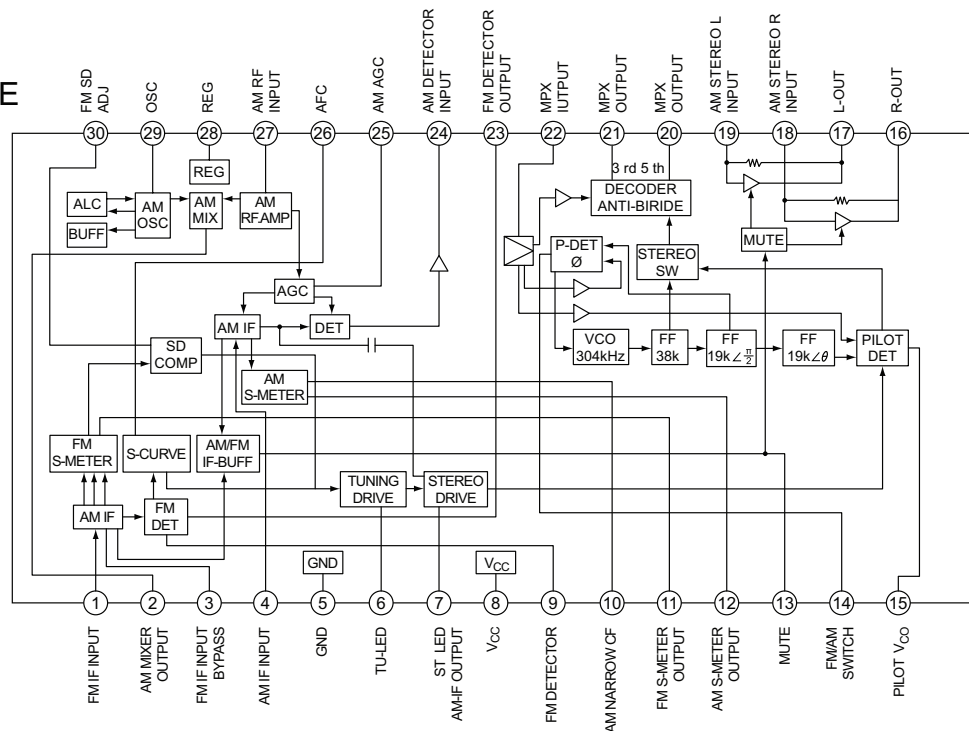
Main Board

U701: 74HC86



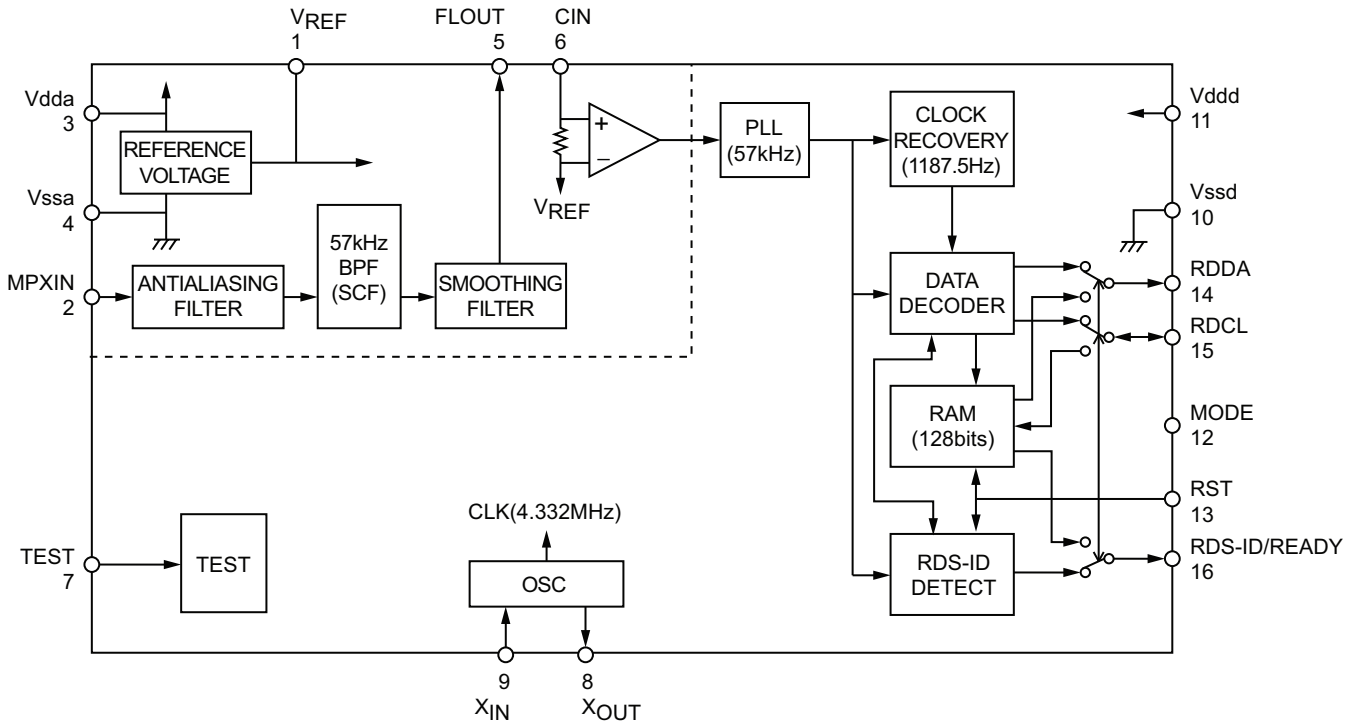
Main Board

U901: LA1837L-E



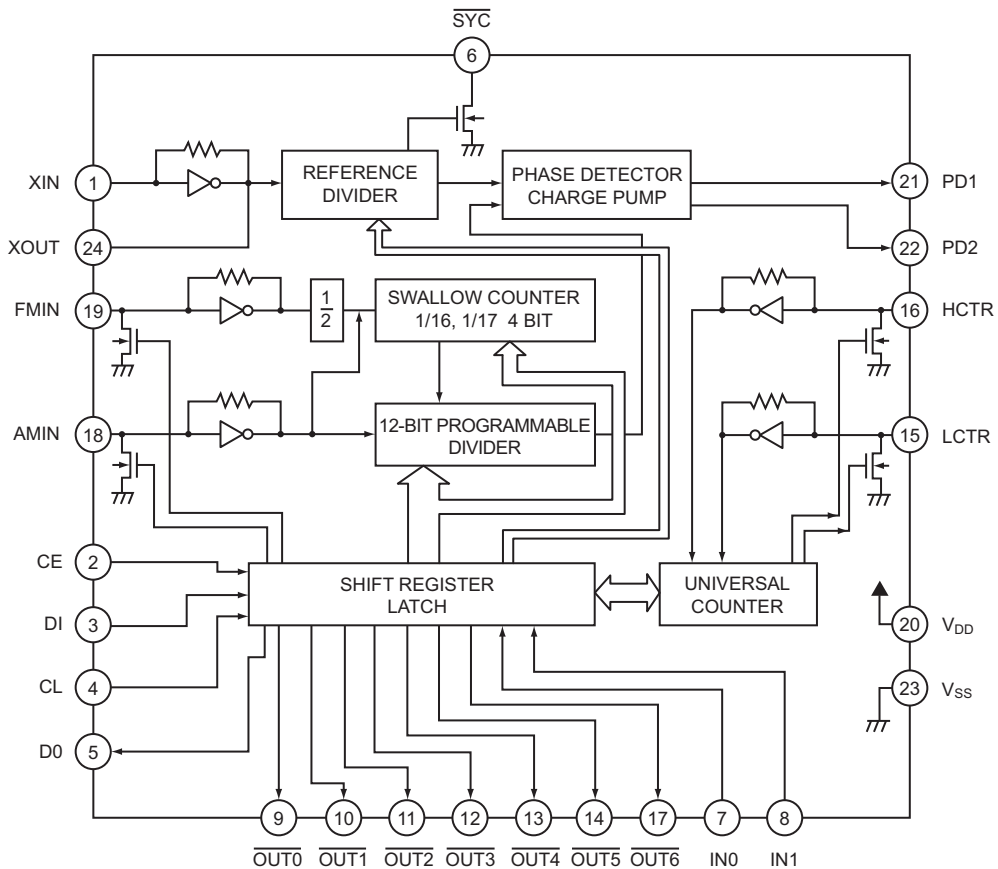
Main Board

U902: LC72723M

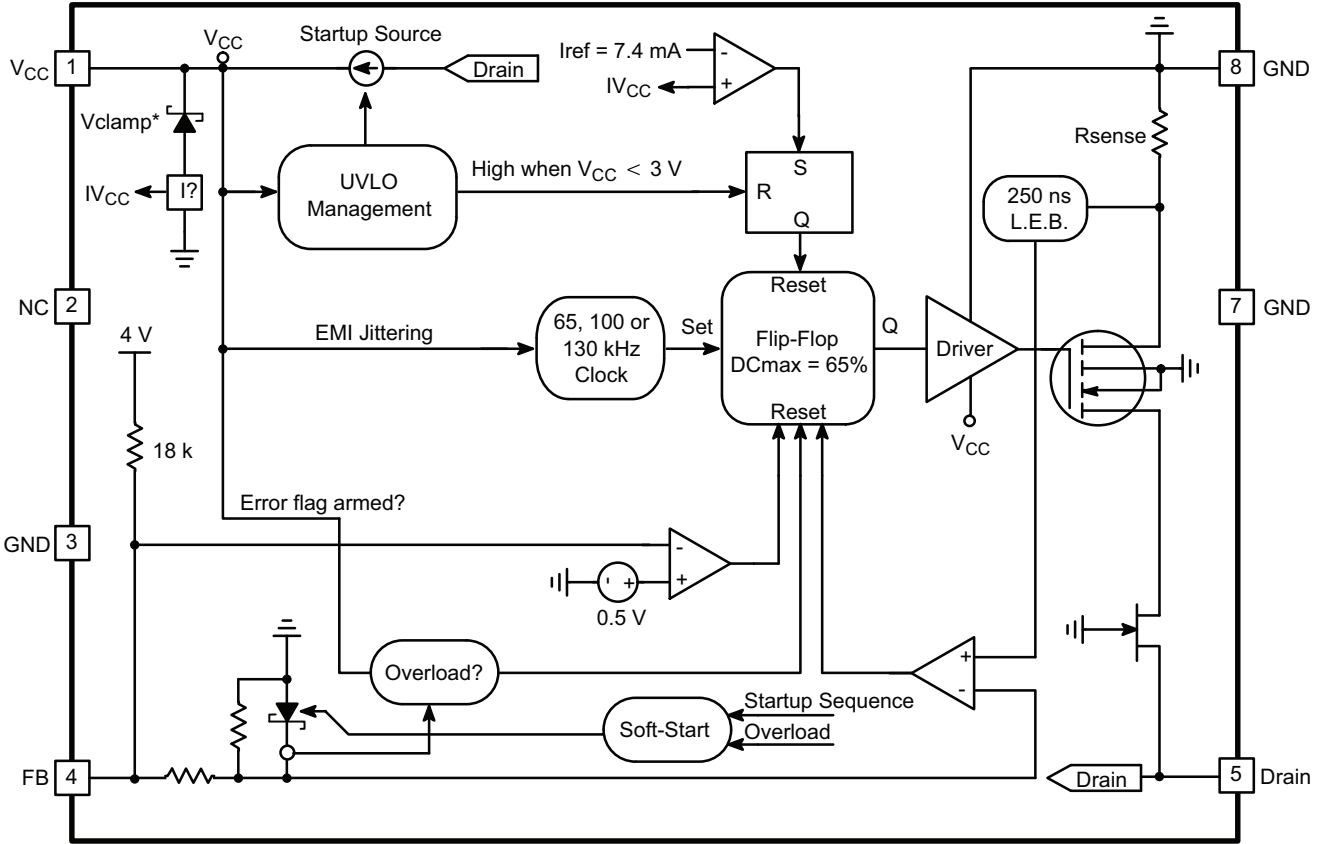
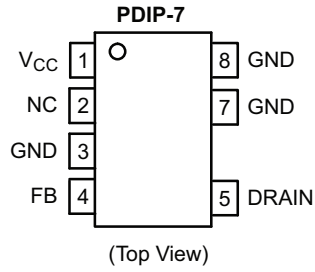


Main Board

U903: LC7218-E

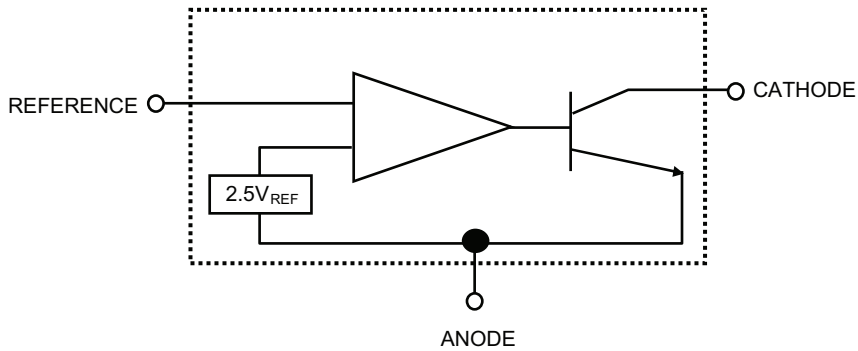


PSU Board
U101: NCP1014



* $V_{clamp} = V_{CC_{OFF}} + 200\text{ mV}$ (8.7 V Typical)

PSU Board
U102: SHUNT REGULATOR TL431/A /C



ELECTRICAL PARTS LIST

Location	Part Number	Description
PCB ASSY DSP EU		
1002	SVC-C42626+DSP	PCB ASSY DSP EU
PC BOARD		
1006	1726-042A+000B	PCB MAIN/KEY/DIS/PSU/LED
CAPACITOR		
C201	157C-107M+K-IU	CE 10V 100uF 20% R5 5X11
C202	150F-103K+2-DC	CC 50V 0.01U 10% AT
C210	150F-104K+2-FC	CC 50V 0.1UF 10% AT
C212	157C-107M+K-IU	CE 10V 100uF 20% R5 5X11
C213	150F-104K+2-FC	CC 50V 0.1UF 10% AT
DIODE		
D210	4804-1480+C	DIODE 1N4148M-A(WA) ATS
WAFER/SOCKET		
J202A	2101-1441+0	FLEXIBLE CONN 15P P1.0 R
TRANSISTOR		
Q201	485C-114E+K	TR DTC114ES RLT
RESISTOR		
R221	4705-182J+C	RCF 1/4W 1.8K 5% ATS
R219, R222	4705-681J+C	RCF 1/4W 680R 5% ATS
R220, R252	4705-821J+C	RCF 1/4W 820R 5% ATS
R210, R211	4711-151A+2	RMF 1/8W 150R 1% AT
R251	4701-103J+2	RCF 1/8W 10K 5% AT
R215, R216	4705-471J+C	RCF 1/4W 470R 5% ATS
R225, R250, R261, R262, R263	4705-472J+C	RCF 1/4W 4.7K 5% ATS
R227	4705-563J+C	RCF 1/4W 56K 5% ATS
IC		
U202	3131-8700+0	IC PT6311(L) VFD DRIVER
	3132-8361+0	PT6311B -LQ (L) VFD DRIVER
MISCELLANEOUS		
J201A, J203A	7013-0490+0	WIRE-CONN 4P P2.0 #28
M201, M202, M203, M204, M205, M206	5200-4905+0	SW TACT 6X6 H=5 2P
M210	4812-TM1N+3	IR SENSOR KSM-902TM1E
M210B	4151-9671+1	SPONGE 12X10X3
VFD	2460-1961+0	DISPLAY-VFD HNA-10SM55

Location	Part Number	Description
VFDA	4135-8341+0	HOLDER-VFD TINNED STEEL
VFDB	4154-4881+1	CUSHION 21X8X2
<u>PCB ASSY KEY EU</u>		
1005	SVC-C42626+KEY	PCB ASSY KEY EU & CA
<i>PC BOARD</i>		
1006	1726-042A+000B	PCB MAIN/KEY/DIS/PSU/LED
<i>WAFER/SOCKET</i>		
J201B	2102-040R+J01	WAFER 4P P2.0 90DEG
<i>MISCELLANEOUS</i>		
C230, C231	150F-103K+2-DC	CC 50V 0.01U 10% AT
VR201	5200-4951+1	ENCODER ROTARY DPDT
<u>PCB ASSY LED EU</u>		
1004	SVC-C42626+LED	PCB ASSY LED EU & CA
<i>PC BOARD</i>		
1006	1726-042A+000B	PCB MAIN/KEY/DIS/PSU/LED
<i>WAFER/SOCKET</i>		
J203B2	2102-040R+J01	WAFER 4P P2.0 90DEG
<i>MISCELLANEOUS</i>		
D209	3700-2858+AB	LED SP 5X5XL0.5 AM/BU
M207	5200-4905+0	SW TACT 6X6 H=5 2P
<u>PCB ASSY MAIN EU</u>		
1001 *EU	SVC-C42626+MAIN	PCB ASSY MAIN EU
1001 *CA	SVC-C426D6+MAIN	PCB ASSY MAIN CA
<i>PC BOARD</i>		
1006	1726-042A+000B	PCB MAIN/KEY/DIS/PSU/LED
<i>CAPACITOR</i>		
C203	150F-223K+2-FD	CC 50V 0.022uF 10% AT
C204	157E-477M+K-OV	CE 25V 470U 20% RLT
C205, C206, C207, C208, C209	150F-104K+K-II	CC 50V 0.1U 10% RLT 5x5
C215	157D-227M+K-LUE	CE 16V 220U 20% RLT 6.3X

Location	Part Number	Description
C217	150F-223K+2-FD	CC 50V 0.022uF 10% AT
C219, C222	150F-104K+K-II	CC 50V 0.1U 10% RLT 5x5
C223	157F-475M+K-IU	CE 50V 4.7U 20% RLT 5X11
C401, C402, C403, C404	150F-223K+2-FD	CC 50V 0.022uF 10% AT
C405, C406	157D-228M+5-X&TU	CE 16V 2200U 20% RL
C407	157D-226M+K-IU	CE 16V 22U 20% RLT 5x11
C408	157D-228M+5-X&TU	CE 16V 2200U 20% RL
C409	157D-227M+K-LUE	CE 16V 220U 20% RLT 6.3X
C410, C411	150F-104K+K-II	CC 50V 0.1U 10% RLT 5x5
C412	157E-108M+5-S9T	CE 25V 1000U 20% RL
C413	157Q-227M+K-OV	CE 35V 220U 20% RLT 8x11
C414	157D-107M+K-IUE	CE 16V 100U 20% RLT 5X11
C415, C416, C418	157F-107M+K-OW	CE 50V 100U 20% RLT 8X12
C419	157C-107M+K-IU	CE 10V 100uF 20% R5 5X11
C420	157D-228M+5-X&TU	CE 16V 2200U 20% RL
C421	157D-477M+K-OVE	CE 16V 470U 20% RLT
C701	150F-473K+2-GD	CC 50V 0.047UF 10% AT
C702	157D-106M+K-IU	CE 16V 10U 20% RLT 5X11
C706	150F-104K+K-II	CC 50V 0.1U 10% RLT 5x5
C707	153F-102J+K-IM	CM 50V 1000P 5% RLT 5x7
C708	150F-104K+K-II	CC 50V 0.1U 10% RLT 5x5
C709	157D-477M+K-OVE	CE 16V 470U 20% RLT
C901 *EU	150F-223K+2-FD	CC 50V 0.022uF 10% AT
C902, C903	150F-223K+2-FD	CC 50V 0.022uF 10% AT
C904	157D-106M+K-IU	CE 16V 10U 20% RLT 5X11
C905	157E-108M+5-S9T	CE 25V 1000U 20% RL
C906	150F-223K+2-FD	CC 50V 0.022uF 10% AT
C907	157D-477M+K-OVE	CE 16V 470U 20% RLT
C911	150F-220J+2-DC	CC 50V 22P 5% AT 2.3X2
C912, C913	150F-102K+2-DC	CC 50V 1000P 10% AT
C914, C915	150F-101K+2-DC	CC 50V 100P 10% AT
C916	150F-331K+2-DC	CC 50V 330P 10% AT
C924	15CH-270J+5-GG	CTC 0/60 27pF 5% RL 4x4
C925	15CH-200J+5-GG	CTC 0/60 20pF 5% RL 4x4
C926	153I-333J+V-NLM	CM 63V 0.033U 5% RBT 7.2
C927	157F-225M+K-IU	CE 50V 2.2U 20% RLT 5X11
C928	157D-106M+K-IU	CE 16V 10U 20% RLT 5X11
C929	157F-224M+K-GM	CE 50V 0.22U 20% RLT 4X7
C930	150F-223K+2-FD	CC 50V 0.022uF 10% AT
C931	157C-107M+K-IU	CE 10V 100uF 20% R5 5X11
C932, C941	150F-223K+2-FD	CC 50V 0.022uF 10% AT
C942	157D-228M+5-X&TU	CE 16V 2200U 20% RL
C943	157F-225M+K-IU	CE 50V 2.2U 20% RLT 5X11
C944	157F-475M+K-IU	CE 50V 4.7U 20% RLT 5X11

Location	Part Number	Description
C945	150F-101K+2-DC	CC 50V 100P 10% AT
C946	157F-105M+K-IUW	CE 50V 1U 20% RLT 5X11
C947	150F-474M+K-II	CC 50V 0.47U 20% RLT 5X5
C948	157F-105M+K-IUW	CE 50V 1U 20% RLT 5X11
C949, C950	150F-223K+2-FD	CC 50V 0.022uF 10% AT
C951	157F-475M+K-IU	CE 50V 4.7U 20% RLT 5X11
C953, C954	153F-272J+K-IMF	CM 50V 2700P 5% RLT 5X7
C959, C960	157D-226M+K-IU	CE 16V 22U 20% RLT 5x11
C961 *EU	153F-152J+K-JM	CM 50V 1500P 5% RLT
C961 *CA	153F-272J+K-IMF	CM 50V 2700P 5% RLT 5X7
C962 *EU	153F-152J+K-JM	CM 50V 1500P 5% RLT
C962 *CA	153F-272J+K-IMF	CM 50V 2700P 5% RLT 5X7
C963, C964	157D-226M+K-IU	CE 16V 22U 20% RLT 5x11
C965	153F-272J+K-IMF	CM 50V 2700P 5% RLT 5X7
C966	150F-223K+2-FD	CC 50V 0.022uF 10% AT
C967	150F-474M+K-II	CC 50V 0.47U 20% RLT 5X5
C968	150F-223K+2-FD	CC 50V 0.022uF 10% AT
C969	157D-476M+K-IUW	CE 16V 47U 20% RLT 5X11
C970	150F-223K+2-FD	CC 50V 0.022uF 10% AT
C971	15CH-080D+5-GG	CTC 0/60 8pF 0.5pF RL
C973	153I-473J+V-NLM	CM 63V 0.047U 5% RBT 7.2
C974	150F-223K+2-FD	CC 50V 0.022uF 10% AT
C975	157D-106M+K-IU	CE 16V 10U 20% RLT 5X11
C976	150F-223K+2-FD	CC 50V 0.022uF 10% AT
C977	157F-225M+K-IU	CE 50V 2.2U 20% RLT 5X11
C978	150F-223K+2-FD	CC 50V 0.022uF 10% AT
C979	157D-226M+K-IU	CE 16V 22U 20% RLT 5x11
C980	153I-224J+V-NL	CM 63V 0.22U 5% RBT
C981, C983, C984	150F-223K+2-FD	CC 50V 0.022uF 10% AT
C982	150F-101K+2-DC	CC 50V 100P 10% AT
C985	150F-561K+K-IEA	CC 50V 560P 10% RLT 5x3
C986	157C-107M+K-IU	CE 10V 100uF 20% R5 5X11
C987	150F-223K+2-FD	CC 50V 0.022uF 10% AT
C988, C989	15CH-300J+5-IG	CTC 0/60 30pF 5% RL 5x4
C990	157C-107M+K-IU	CE 10V 100uF 20% R5 5X11
C991	153F-102J+K-IM	CM 50V 1000P 5% RLT 5x7
C992	150F-103K+2-DC	CC 50V 0.01U 10% AT
C993, C994	153F-152J+K-JM	CM 50V 1500P 5% RLT
C995	150F-223K+2-FD	CC 50V 0.022uF 10% AT
C996	157D-107M+K-IUE	CE 16V 100U 20% RLT 5X11
C998, C999	153F-152J+K-JM	CM 50V 1500P 5% RLT
DIODE		
C216	4837-4B31+2	DZ 1/2W 4.17-4.43V ROHM

Location	Part Number	Description
D208	4802-1000+2	DIODE SCHOTTKY 100V
D401, D402, D403, D404, D405, D406, D407, D408, D409	4804-0010+2	DIODE W1N4001-A(WA) AT
D410	4837-27V0+2	DZ 1/2W 27V(26.2-27.6)AT
D411, D412	4837-10D1+2	DZ 1/2W 9.94-10.44V ROHM
D701	4802-02K0+3	DIODE SW 80V 300MA
D903	4837-3V36+2	DZ 1/2W +-5% 3.3V TEMIC
D905	4802-1000+2	DIODE SCHOTTKY 100V
D980	4804-1480+2	DIODE 1N4148T AT
Z203	4837-6B21+2	DZ 1/2W M5.96-6.27V ROHM
L971-C	4803-48S0+K	DIODE VARICAP 16 100NA
WAFER/SOCKET		
J202B	2101-1536+0	FFC CONNECTOR 15P P1.0
J301B	2102-031R+004	WAFER 3P P2.5 RIGHT
J401B	2102-081S+004	WAFER 8P P2.5 ST.
O205 *EU	2107-0681+0	ANT-TERMINAL (DIN-TYPE)
O205 *CA	2107-0641+0	ANT-TERMINAL F-TYPE
JACK/SOCKET		
M303	2113-1179+0	PHONE JACK D3.5 BK
M987	2113-1300+0	2P RCA JACK W/R AU
COIL		
J219	1801-101K+M-2	COIL 100UH 10% AT
J937, J942, J958	1808-0680+0	FERRITE BEAD INDUCTOR
L901	1801-220K+M-2	COIL 22UH 10% AT BL7
L905, L985	1801-101K+M-2	COIL 100UH 10% AT
R955 *EU	1801-101K+M-2	COIL 100UH 10% AT
R955 *CA	1801-101K+M	COIL 100UH 10%
CRYSTAL		
M905	2300-0440+0	CRYSTAL 7.2MHZ 20PPM
CERAMIC FILTER		
M902	2701-0010+1	CF10.7 +-30
M903 *EU	2701-0010+1	CF10.7 +-30
M904	2701-0010+1	CF10.7 +-30
M911	2701-0680+0	CF 450 +-1
TRANSISTOR		
Q401, Q402	485A-950Y+K	TR 2SA950-Y HFE100-200
Q403	4860-0050+K	TR SS8050 C/D RLT
Q702	4851-9230+K	TR NPN 2SC1923-0

Location	Part Number	Description
Q901 *EU	485C-945P+K	TR NPN 2SC945P
Q902	4851-9230+K	TR NPN 2SC1923-0
Q903	485A-114E+K	TR DTA114ESA RLT ROHM
Q922, Q923, Q942	4860-1590+K	TR 2SC1740STPR
Q943, Q944	4860-8120+G	TR 2SD1468S TPS ROHM
Q945	485A-114E+K	TR DTA114ESA RLT ROHM
Q980	485C-114E+K	TR DTC114ES RLT
Q981	485A-114E+K	TR DTA114ESA RLT ROHM
Q982	4853-63BL+5	TR N-JEET 2SK-363BL(F)
Q983, Q984	485C-114E+K	TR DTC114ES RLT
RESISTOR		
R701	4705-152J+C	RCF 1/4W 1.5K 5% ATS
R902, R931	4705-220J+C	RCF 1/4W 22R 5% ATS
R911, R928	4705-221J+C	RCF 1/4W 220R 5% ATS
R950	4705-684J+C	RCF 1/4W 680K 5% ATS
R905 *EU	4705-681J+C	RCF 1/4W 680R 5% ATS
R208, R209	4701-750J+2	RCF 1/8W 75R 5% AT
R235, R236	4701-103J+2	RCF 1/8W 10K 5% AT
R705	4711-272A+2	RMF 1/8W 2.7K 1% AT
R906	4701-103J+2	RCF 1/8W 10K 5% AT
R912	4701-101J+2	RCF 1/8W 100R 5% AT
R915	4701-103J+2	RCF 1/8W 10K 5% AT
R927	4701-103J+2	RCF 1/8W 10K 5% AT
R944	4701-104J+2	RCF 1/8W 100K 5% AT
R945	4701-103J+2	RCF 1/8W 10K 5% AT
R947, R948	4701-103J+2	RCF 1/8W 10K 5% AT
R954	4701-103J+2	RCF 1/8W 10K 5% AT
R963, R964	4701-104J+2	RCF 1/8W 100K 5% AT
R969	4701-104J+2	RCF 1/8W 100K 5% AT
R972	4701-103J+2	RCF 1/8W 10K 5% AT
R974	4701-104J+2	RCF 1/8W 100K 5% AT
R978	4701-105J+2	RCF 1/8W 1M 5% AT
R981	4701-101J+2	RCF 1/8W 100R 5% AT
R983	4701-104J+2	RCF 1/8W 100K 5% AT
R984	4701-105J+2	RCF 1/8W 1M 5% AT
R989	4701-103J+2	RCF 1/8W 10K 5% AT
R993, R997	4701-104J+2	RCF 1/8W 100K 5% AT
R403	4705-100J+C	RCF 1/4W 10R 5% ATS
R401, R402, R404, R704, R916, R919, R920, R923, R924, R951, R968, R985, R986, R987, R990,	4705-102J+C	RCF 1/4W 1K 5% ATS
R706	4705-153J+C	RCF 1/4W 15K 5% ATS
R973	4705-183J+C	RCF 1/4W 18K 5% ATS
R921, R922, R929	4705-222J+C	RCF 1/4W 2.2K 5% ATS

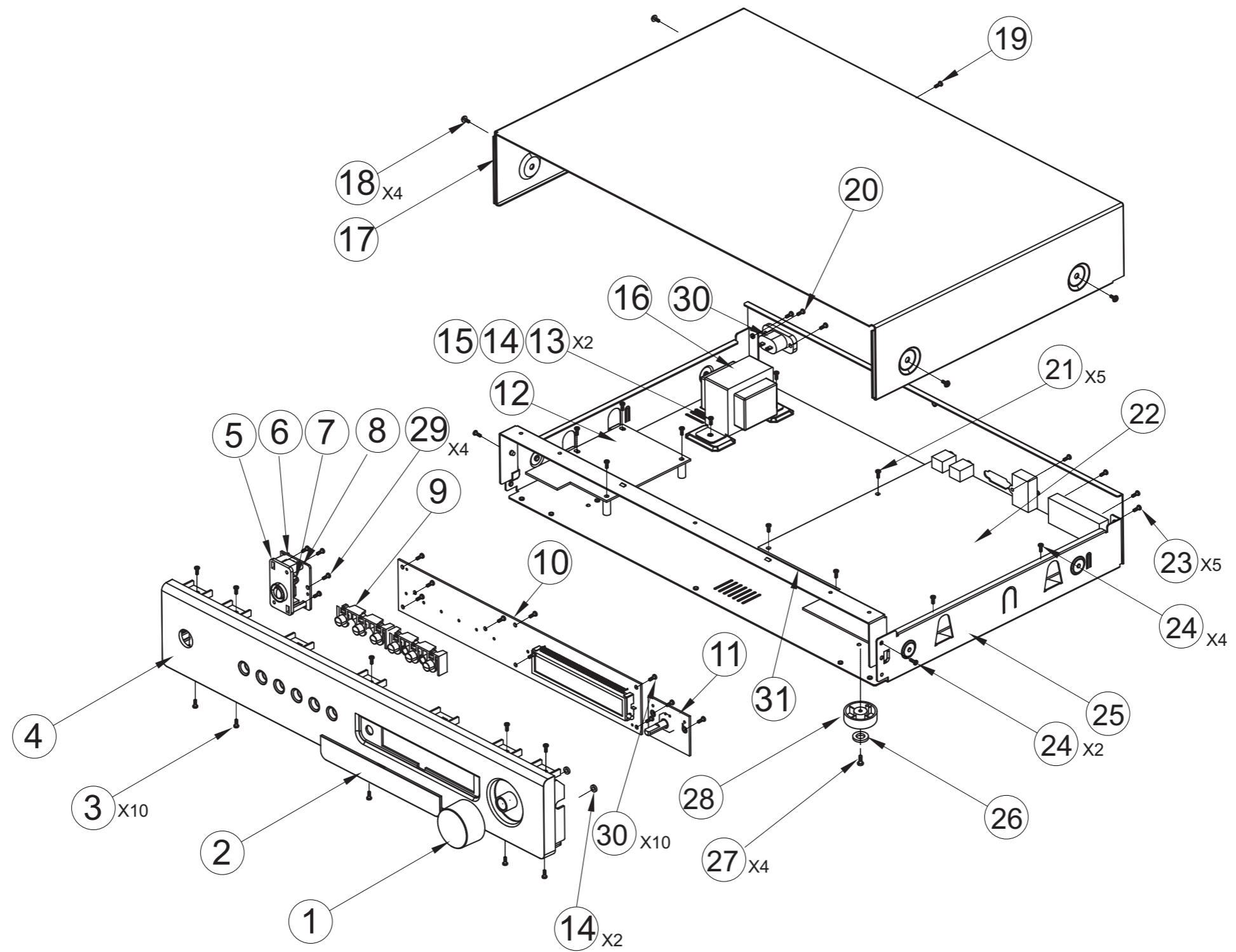
Location	Part Number	Description
R207, R933, R952, R953	4705-223J+C	RCF 1/4W 22K 5% ATS
R703	4705-303J+C	RCF 1/4W 30K 5% ATS
R702, R904, R909, R910	4705-331J+C	RCF 1/4W 330R 5% ATS
R907, R946, R949,	4705-332J+C	RCF 1/4W 3.3K 5% ATS
R212, R228, R908, R961, R962, R988	4705-471J+C	RCF 1/4W 470R 5% ATS
D981, R202, R213, R214, R708, R918, R942, R982	4705-472J+C	RCF 1/4W 4.7K 5% ATS
R418, R991	4705-473J+C	RCF 1/4W 47K 5% ATS
R999	4705-512J+C	RCF 1/4W 5.1K 5% ATS
R992	4705-682J+C	RCF 1/4W 6.8K 5% ATS
R943	4705-822J+C	RCF 1/4W 8.2K 5% ATS
R903 *EU	4705-123J+C	RCF 1/4W 12K 5% ATS
R901 *EU	4705-333J+C	RCF 1/4W 33K 5% ATS
R957, R958 *EU	4705-392J+C	RCF 1/4W 3.9K 5% ATS
R957, R958 *CA	4705-562J+C	RCF 1/4W 5.6K 5% ATS
R975 *EU	4705-563J+C	RCF 1/4W 56K 5% ATS
R975 *CA	4705-243J+C	RCF 1/4W 24K 5% ATS
R959, R960 *EU	4701-274J+2	RCF 1/8W 270K 5% AT
R959, R960 *CA	4705-124J+C	RCF 1/4W 120K 5% ATS
IC		
U201	3132-3561+0	IC MCU 16K FLASH P89
U203	3131-7250+1	IC MEMORY EEPROM 8K
U204	3132-2521+0	IC MAX3232ECWE+ RS232 TX
U206	3132-1481+0	IC REG NCP1117ST33T3G
U402	3130-2020+2	IC NJM7805FA-#ZZZB
U701	3131-9330+0	IC QUAD 2INPUT EXCLUSIVE
U901	3130-8180+0	IC LA1837L-E AM/FM IF
U902	3131-9040+0	IC LC72723M-TLM-E RDS
U903	3131-3760+0	IC LC7218-E PLL FREQ
VR/SVR		
R941	4756-2036+3-03	SVR H3 20K
R956	4756-1036+3-06	SVR 10K H3 7X7.6 RH0615C
TUNER		
M901	1300-0946+0	TUNER FM CE VER
MISCELLANEOUS		
J201	2113-1749+0	SOCKET DB9 D SUB RA
L903, L904	5600-3386+0	COIL MPX LPF 0.4-13KHZ
L941	5600-3396+S	COIL FM DET-1 10.7MHZ
L942	5600-3406+S	COIL FM DET-2 10.7MHZ
L971-A	5600-3467+0	COIL AM IFT 500K-1750K
L971-B	5600-3468+0	COIL AM OSC 950K-2200K

Location	Part Number	Description
L972	5600-3416+S	COIL AM IFT NMIF-4062
Label	3002-0027+0	LABEL-BLANK 10X5 WHT PET
M302	2113-2036+1	JACK PHONE 4P RED D315
M985	2300-1220+0	CRYSTAL 4.332MHZ
M986	4131-7701+0	ANTENNA WASHER
P901	2113-1160+0	WAFER 2P ST. P=2.5 NH
U201A	312A-0970+01	SOFTWARE MCU C426V04
U201C	3005-5361+0	RIBBON 60MMX300M BLACK
PCB ASSY PSU		
1003 *EU	SVC-C42626+PSU	PCB ASSY PSU EU
1003 *CA	SVC-C426D6+PSU	PCB ASSY PSU CA
PC BOARD		
1006	1726-042A+000B	PCB MAIN/KEY/DIS/PSU/LED
CAPACITOR		
C100, C101	8910-0049+0	CAP400V 4700P
C102, C103	157T-475M+5-S5T	CE 400V 4.7U 20% RL
C104	8910-0091+0	CC 400V 0.01UF +-20% RL
C105	157D-106M+K-IUE	CE 16V 10U 20% RLT 5X11
C106	157Q-476M+K-LUTU	CE 35V 47U 20% RLT
C107, C110	157D-477M+K-OVE	CE 16V 470U 20% RLT
C109	150F-103K+2-DC	CC 50V 0.01U 10% AT
C111	150F-104K+2-FC	CC 50V 0.1UF 10% AT
C112	150F-102K+2-DC	CC 50V 1000P 10% AT
C116	8910-0049+0	CAP400V 4700P
DIODES		
D101, D102, D103, D104	4804-0070+2	DIODE IN4007-F AT
D105	4840-8530+2	RECTIFIER UF4006-T GI AT
D106	4802-1000+2	DIODE SCHOTTKY 100V
D107	4840-8530+2	RECTIFIER UF4006-T GI AT
D108	4801-A600+2	DIODE SCHOTTKY 60V 2A
D109	4804-0070+2	DIODE IN4007-F AT
D301	4804-1480+2	DIODE 1N4148T AT
WAFER/SOCKET		
J301A	2102-031R+004	WAFER 3P P2.5 RIGHT
COIL		
L102	1807-273J+PS	COIL 27MH 5% 8.3X9.7

Location	Part Number	Description
TRANSISTOR		
Q301	4860-8810+U	TR NPN MPSA42 300V 0.5A
Q302	485C-114E+K	TR DTC114ES RLT
RESISTOR		
R102	4718-104J+2	RMF 1W 100K 5% AT
R103	4715-152A+2	RMF 1/4W 1.5K 1% AT
R106	4711-203A+2	RMF 1/8W 20K 1% AT
R108 *EU	4717-335J+2-S1	RMF 1/2W 3.3M 5% AT
R301	4701-101J+2	RCF 1/8W 100R 5% AT
R104	4705-102J+C	RCF 1/4W 1K 5% ATS
R105	4705-123J+C	RCF 1/4W 12K 5% ATS
FUSE		
F101 *CA	5120-0052+0	FUSE T1.6A 250V 5X20
F101 *EU	5120-1152+0-L	FUSE T1AE 250V 5X20 VDE/
IC		
U101	3132-7351+0	IC POWER NCP1014 PDIP7
U102	3132-2981+0	IC ADJUST SHUNT REG
TRANSFORMER		
T100	1806-4127+0008	TRANSFORMER SW 230V 3W
MISCELLANEOUS		
F101A	4131-9131+0	FUSE HOLDER 6.5MM PITCH
M101, M102, M103, M104, M105	4132-1071+0	TERMINAL PIN
RL101	4500-0770+0	RELAY 3V 5A DPDT


- NOTE:**
- The components identified by \triangle mark are critical for risk of fire and electrical shock. Replace only with part number specified.
 - <*CA> : Canadian / USA model only.
 - <*EU> : European model only.
 - Capacitors : CP-Polystyrene, CM-Mylar, CE-Electrolytic, CC-Ceramic, CTC-NPO.
 - Resistors : RMF-Metal Film, RCF-Carbon Film.

EXPLODED VIEW

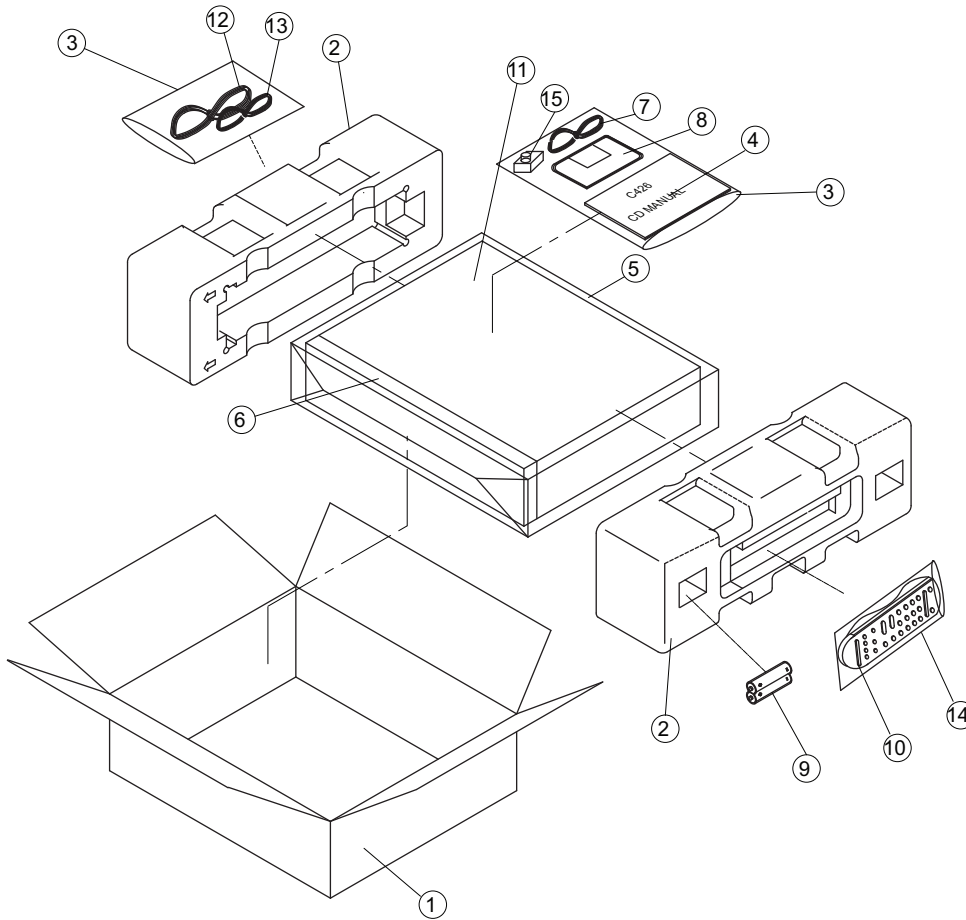


EXPLODED VIEW PARTS LIST

ITEM	PART NUMBER	DESCRIPTION	QTY
1	2446-6205+2	VOLUME KNOB GREY	1
	2446-6206+2	VOLUME KNOB TITANIUM	1
2	3717-6811+0	DISPLAY LENS	1
3	2954-3006+3000	SCREW B-TITE BIND M3X6	10
4	SVC-C42626+FRONT	Complete fascia assembly with buttons, window, & VFD Titanium	1
	SVC-C42627+FRONT	Complete fascia assembly with buttons, window, & VFD Graphite	1
5	3717-7012+0	POWER BUTTON LENS GREY	1
	3717-7011+0	POWER BUTTON LENS TITANIUM	1
6	SVC-42626+LED	LED PCB ASSY	1
7	2447-7301+0	POWER BUTTON	1
8	2601-3004+0801	FIBRE WASHER ID3 OD8	2
9	2447-7201+0	INPUT BUTTON GREY	2
	2447-7202+0	INPUT BUTTON TITANIUM	2
10	SVC-C42626+DSP	Keyboard with VFD ASSY	1
11	SVC-C42626+KEY	Encoder Assembly	1
12	SVC-C426D6+PSU	PSU PCB ASSY AH, SVC-C42626+PSU PSU PCB ASSY C	1
13	2954-4008+3000	SCREW B-TITE BIND M4X8	2
14	2600-4012+1203	WASHER METAL M4X1.2X12	4
15	2607-4010+0700	SPRING WASHER M4X1X7	2
16 	1806-3541+2	TRANSFORMER	1
17	1402-3534+0	COVER-TOP SECC BLACK	1
	1402-3532+0	TOP COVER SILVER	1
18	2900-4006+2010	M4X6 (TITANNIUM VERSION)	4
	2900-4006+3010	M4X6 (GREY VERSION)	4
19	2954-3010+4000	SCREW M3X10(TITANNIUM VERSION)	1
	2954-3008+3000	SCREW M3X8 (GREY VERSION)	1
20	2904-3008+3000	SCREW MACHINE BIND M3X8	2
21	2904-3006+3000	SCREW M3X6 BINDING (BLK)	5
22	SVC-C426D6+MAIN	MAIN PCB ASSY AH, SVC-C42626+MAIN MAIN PCB ASSY C	1
23	2954-3008+3000	SCREW B-TITE BIND HEAD M3X8	2
24	2954-3006+3000	SCREW B-TITE BIND M3X6	4
25	1402-3511+2	CHASSIS-BOTTOM SECC T=1 *EU	1
	1402-351J+2	CHASSIS-BOTTOM SECC T=1 CSA *CA	1
26	4152-4641+1	CUSHION	4
27	2954-3006+3000	SCREW B-TITE BIND M3X6	4
28	4157-0501+1	PLASTIC FOOT	4
29	2954-3008+3000	SCREW B-TITE BIND HEAD M3X8	14
30	2113-3317+0	SOCKET AC 2PIN 250V 2.5A	1
31	1402-3783+2	STRAP	1
1,2,4,5,7,8,9,10, & 14x2	SVC-C42626+FRONT	C426 fascia assembly with VFD / keyboard Titanium	1
	SVC-C42627+FRONT	C426 fascia assembly with VFD / keyboard Graphite	1

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 - <*EU > : European model only.

PACKING DIAGRAM



ITEM	PART NO.	DESCRIPTION	Q'TY
1	1439-1401+0-2	CARTON-OUTER	1
2	1490-3784+2	POLYFORM ENDCAP	2
3	1497-4122+0	POLYBAG MANUAL	2
4	4115-0021+0	CD MANUAL	1
5	1497-7492+0	POLYBAG 600X600X0.04MM	1
6	4201-0010+0	NON WOVEN CLOTH BAG	1
7	2107-0661+1	300-OHM T ANTENNA	1
8	2107-1131+0	NMA-3057 AM LOOP ANTENNA	1
9	4060-0530+0	GREENCELL 3A SIZE GP24G2	2
10	8912-0055+1	REMOTE CONTROL C426	1
11	1450-2520+0	WHITE PAPER A3	1
12	7012-9331+0	CORD-AC UL/CSA 125V 10A	1
	7012-9301+0	CORD-AC PWR CE 250V 10A	1
13	2103-7302+1	RCA PLUG (MALE)	1
14	1497-1932+0	POLYBAG FOR REMOTE CONTROL	1
15	2103-6101+1	RF CONNECTOR PLUG BALUN	1

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